



## NEWS: EUROPE

# Tietmeyer split with Brussels on Emu

By Andrew Fisher in Magdeburg

Differences between Germany and the European Commission over how monetary union should be implemented broke out into the open yesterday when Mr Hans Tietmeyer, president of the Bundesbank, criticised the method proposed in the recent Brussels green paper.

Although he did not state the central bank's objections, it is known to disagree with the green paper's proposal that a joint currency should be introduced in stages - first for large banking and other payments transactions and later for the public - after European monetary union (Emu) has been agreed.

The Bundesbank wants the new coins and notes to be brought in for all users at the end of the process, or

several years after Emu's likely start in 1999.

"We think this is too important a subject to be solved at a rapid gallop," Mr Tietmeyer said at a press conference after the central bank council met in east Germany. "In the Bundesbank, I can say we have a certain reservation about the critical mass concept (set out in the green paper) as it has been presented."

Under this concept, the new coins and notes would be brought in first for banking, insurance, commercial and government use. But the public would continue using national currencies until a "critical mass" had been established for the new currency's full introduction.

The Commission argues this would make the notion of a joint currency more credible to citizens.

The Bundesbank feels credibility

should be possible without having to lead up to the widespread use of a joint currency and thus favours the "delayed big bang" idea. It points out that while big banks will be able to adjust to the staggered introduction of the new currency - Deutsche Bank, Germany's biggest bank, supports the green paper - smaller savings and other banks will need more time to adjust their operations, especially computer systems.

Mr Theo Waigel, Germany's finance minister, also at the Bundesbank meeting - before flying to the Halifax summit of leading industrial nations - was more circumspect, but made clear the government also did not agree fully with the Commission's proposals.

"The discussions should not be limited to one scenario," he said.

Both men also highlighted the role in the Emu preparations of the European Monetary Institute, the Frankfurt-based forerunner of the planned European central bank. Mr Waigel said the EMI's view was of "great significance". Mr Tietmeyer said it was conducting intensive studies into how Emu should be introduced and had sent out a questionnaire to banks; the EMI's initial views should be presented by the year's end.

So far, the institute has not commented on the green paper. It had no speakers at last week's Emu conference organised by Deutsche Bank and attended by Mr Yves-Thibault de Silguy, the European monetary commissioner, who presented the paper to a partly sceptical audience.

Mr Waigel emphasised the importance of strict adherence to the economic convergence criteria ahead of Emu. "The convergence criteria are, and remain, more decisive for us than all timetable plans," he said.

Noting that Germany was well within the criteria, he said its budget deficit could fall to 1 per cent of gross domestic product by 2000, if public spending rose only 3 per cent a year. "This would be well below the Maastricht criterion (of 3 per cent) which we achieved last year."

Both men expressed confidence in the progress of the east German economy. Mr Tietmeyer hoped the high level of transfers and subsidies to the east - totalling some DM100bn (£72bn) a year - could gradually be reduced over the longer term as growth, investment and job creation improved.

# Bosnian minister fuels fears of big military offensive

By Laura Silber in Belgrade and Our Foreign Staff

Bosnia's foreign minister yesterday fuelled expectations of an imminent military offensive to break the Serb encirclement of Sarajevo by saying the city could not endure another winter under siege.

Mr Muhammed Sacirbey, an outspoken member of Bosnia's Modem-led government, said in Vienna that his country's army had to take "preventive measures" because the Serbs were introducing new armour into the Sarajevo area despite international warnings to keep heavy weapons out.

"This exclusion zone and ultimatum have not been honoured and the Serbs have brought new forces and new weapons into the area. There-

fore we have to take preventive measures," Mr Sacirbey said after talks at the Austrian foreign ministry.

He declined to comment directly on reports from United Nations officials in Sarajevo that up to 30,000 Bosnian government soldiers were massing north of the capital, in an apparent preparation to break the 38-month-old Serb encirclement.

"I can neither confirm nor deny (the reports) but certainly as part of our overall strategic situation... we must be prepared not to liberate Sarajevo but actually to defend Sarajevo at this time," he said.

As well as voicing concern about the Bosnian army build-up, UN officials said they feared the Bosnian Serbs were stalling on the release of 26

peacekeepers who remain in custody despite the release in recent days of more than 300 others.

Mr Yuri Chizhik, a UN spokesman, said that Bosnian Serbs still held 26 UN military observers and soldiers, including 12 Canadians.

Mr Radovan Karadzic, the Bosnian Serb leader, claimed on Tuesday that only 14 would remain in custody for a short time longer, for what he described as technical reasons.

Mr Chizhik said that "all the technical obstacles are with the Bosnian Serbs, not with us" and UN officials said there were indications that the hostages were still being used as insurance against further Nato air raids. The Serbs took nearly 400 UN peacekeepers hostage after Nato air strikes

on May 25 and May 26. One official said of the remaining hostages: "They are being held as human shields in the most sensitive locations."

He said four of them had last been seen at the Jahorina radar station complex, a radar and air-defence command centre of the former Yugoslav army on a peak near Pale, the mountain stronghold above Sarajevo.

The facility is said to be used to monitor Nato aircraft from the moment they take off from Aviano airbase in Italy.

In other signs of increasing tension, Canadian peacekeepers in Visoko, just north of Sarajevo, said they were braced for a Bosnian government offensive but could not confirm whether it would be aimed to break the siege.

# Belgrade's shadowy strongman steps into diplomatic spotlight

By Laura Silber in Belgrade



Jovica Stanisic: Milosevic's spy chief who knows the secrets of the Bosnian Serbs

Mr Jovica Stanisic showed just the faintest flicker of a smile. But smiling does not come naturally to the head of Serbia's state security police. Not for the first time, he had succeeded in persuading Bosnian Serb leader Radovan Karadzic to free United Nations hostages.

Mr Karadzic and his colleagues looked uncomfortable sitting beside him in the Bosnian Serb headquarters of Pale as Mr Stanisic, throwing steely glances around the room, announced another success for his boss, President Slobodan Milosevic of Serbia.

Mr Stanisic is the police chief turned "special envoy" entrusted by Mr Milosevic with carrying out his promise to western mediators to secure the release of the hostages.

Mr Stanisic was with the all-powerful secret police for more than a decade before the Serbian president rose to power in 1987 but had never been seen in public until a fortnight ago when he began his mission to free the hostages.

Outside of Mr Milosevic's family - Serbia's first lady, Mrs Mira Markovic, is a powerful figure - Mr Stanisic wields the most influence as one of the chosen few who enjoys regular access to the Serbian president. He is said to speak to or see him daily.

The secret of Mr Stanisic's diplomatic success lies in the fact that he was with the Bosnian Serbs from the start of their aggression. He helped them to procure arms and organise their own police forces in 1992. The paramilitary forces which, backed by the Yugoslav Army, carried

out "ethnic cleansing" - expelling, killing, or imprisoning tens of thousands of Moslems from eastern and northern Bosnia in the first months of the war - were backed by Serbia's secret police.

But with relations between Mr Milosevic and the Bosnian Serbs severed - in theory at least - what leverage was Mr Stanisic able to exercise over his wayward kinsmen in Bosnia? According to one observer in Belgrade, Mr Stanisic was likely to have travelled to Pale with threats to reveal financial corruption or details of crimes committed during the war.

The Bosnian Serb leaders, who according to a Serbian MP "adore" Mr Stanisic, know that he does not bluff.

Serbia is the only former communist country in Europe where the police have not been reformed or even challenged to loosen their grip over society.

Indeed, under the presidency of Mr Milosevic, the police have doubled in size to about 100,000. The exact size of Mr

Stanisic's secret service - who form an élite section of the police - is not known.

The prominence in Serbian life of the secret service, and its ability to infiltrate and manipulate all institutions, helps to explain why Serbian politics seldom follow western patterns.

In December 1993, for example, when inflation had skyrocketed to an incredible 1m per cent a month, there was virtually no protest. Mr Milosevic's Socialist party even managed to win in a legislative election. Opposition parties complain that they are powerless against the propaganda machine which the Serbian president has built up with the help of the security police.

The iron grip in which the Belgrade regime holds the country - because of its heavy reliance on the services of Mr Stanisic - has made it easier for the Serbian leadership to shift policy abruptly without having to explain itself.

There were just three letters written after his name - SDB.

Without the flexibility which

he has secured by building up a strong secret service, Mr Milosevic could hardly have allowed himself the luxury of currying favour with the west by abandoning his nationalist proxies in Bosnia and Croatia.

Mr Stanisic grew up in modest circumstances in Crenka, a town in Serbia's northern province of Novi Sad. His next-door neighbour, Milos Kertes, is another faithful henchman of Mr Milosevic and himself a secret policeman.

For many Serbs, Mr Stanisic's name will still be whispered, always associated with the murky world of the Sluzba Drzave Bezbednost (SDB), the state security agency.

When Belgrade University, where he graduated in political science in 1974, was organising a class reunion recently, his was the only phone number which was impossible to find, wrote Mr Ivan Radovanovic of Vreme, the independent weekly magazine.

There were just three letters

written after his name - SDB.

# UK unveils plan to trim EU legislation

By Lionel Barber in Luxembourg

Britain yesterday stepped up its drive to reduce the amount of European Union legislation with two new proposals aimed at curbing the powers of the European Commission and strengthening the role of national parliaments.

The proposals came up at a meeting in Luxembourg of the Reflection group of government-appointed experts charged with preparing the agenda of next year's inter-governmental conference to review the Maastricht treaty. Response was said to be

luke-warm, amid suspicions that the UK is seeking to "roll back" Brussels powers in favour of a looser, more flexible European Union at next year's IGC.

The debate over the IGC agenda pits small against big countries, as well as federalist-minded countries such as Germany and Benelux against sovereignty-conscious Britain and France.

The trickiest issues are majority voting, the right of veto, and the powers of the European Parliament, and the degree of integration necessary to accommodate enlargement to central and eastern

Europe in a Union of up to 27 members.

In Luxembourg yesterday, Mr David Davis, the UK representative, called for a "sunset clause" in which European Commission proposals for legislation would expire if they were not adopted by the Council of Ministers. The top decision-making body.

UK officials said that a three year "sunset clause" would, for example, eliminate the Fifth Company Law directive requiring worker representatives on company boards, first introduced in 1972; or plans to harmonise speed limits.

Mr Davis also sketched ideas

for national parliaments to vet proposals from the Commission to see if they passed a test of "subsidiarity", the code-word for testing whether decisions should be taken at EU, national or local level.

Several delegations favoured giving the European Parliament more power to make the Commission more accountable, but not to the point of voting on the Commission president. At present, the president is appointed by member states, subject to the assent of the parliament.

Mr Westendorp said there was "no great support" for offering national parliaments a second chamber alongside the European Parliament in December.

## EUROPEAN NEWS DIGEST

# Gunmen attack Russian city

Dozens of heavily armed men dressed in camouflage gear yesterday stormed a southern Russian city, killing at least 40 civilians and taking hundreds of hostages in an attack Russian officials linked with besieged separatist forces in nearby Chechnya. First deputy prime minister Oleg Soskovets said the gunmen demanded the withdrawal of Russian troops which achieved last year.

Post facto, a Russian news agency quoted a spokesman for Mr Dzhokhar Dudayev, the leader of Chechen separatists, as denying responsibility for the attack, but the incident provoked a fierce reaction from the Russian leadership and raised fears that it could be the beginning of a wave of Chechen terrorism within Russia. According to Russian officials the gunmen entered Budennovsk, a Russian city of 100,000 some 70km from Chechnya, in two buses and a military jeep. Attackers stormed the city, temporarily seizing a bank, a bank, and a government building and cutting off the town's communication with the outside world.

After an afternoon of gun battles, the gunmen were reported to be holding 100 hostages in the town and to have fled with other hostages, including schoolchildren, in the direction of Chechnya. Mr Sergei Medvedev, spokesman for President Boris Yeltsin, said "the president is deeply concerned by the terrorist attack of Chechen militants in the Stavropol region which resulted in casualties, hostages and disruption of the constitutional order".

Chryssia Freeland, Moscow

## Corporate governance code

The European Union needs a code of best practice for corporate governance standards, as institutional investors increasingly seek to exercise control over the companies they own, according to a paper by the Centre for European Policy Studies, an influential think tank. The study on corporate governance in Europe, to be published today, argues that changes are needed in the relationship between the owners and managers of companies.

The paper urges the adoption of one share, one vote rules, a departure from practice in much of Europe where companies are allowed to set a ceiling on the voting influence of shareholders, regardless of the percentage of shares they own. It says the model code ought to emphasise that shareholders are entitled to appoint or remove directors, approve the dividend and the creation of new shares, and approve corporate by-laws.

Norma Cohen, Investments Correspondent

## Belgian PM to give priority to Emu targets

By Emma Tucker in Brussels



Dehaene: determined

The new Belgian government, expected to be in place by the end of next week, plans to reduce spending drastically and radically rewrite laws on competitiveness, in an effort to be one of the first countries to be party to a single European currency.

Mr Jean-Luc Dehaene, the Christian Democrat prime minister, intends to make reductions in the budget deficit one of the priorities of his centre-left administration, for which negotiations are being completed following last month's general election.

Belgium is determined to join France, Germany, the Netherlands and Luxembourg as the first to accept a single currency before the end of the century.

But questions have been raised about Belgian participation because of its high government deficit and, more seriously, the largest debt as a ratio of gross domestic product in Europe.

The Maastricht treaty stipulates that for a country to participate in European monetary union (Emu), it must reduce its debt-to-GDP level to 60 per cent, or at least be moving towards that target at a satisfactory pace, and reduce its deficit to 3 per cent of GDP. Belgium's deficit in 1994 was 5.4 per cent of GDP. Its debt-to-GDP ratio is 138 per cent.

The new government, again a coalition of the Christian Democrat and Socialist parties in power before the May election, is expected to agree to spending cuts of BFr105bn (£2.6bn) for next year and a change in the law which will allow the government to prevent deteriorations in relation to those of trading partners, then government, unions and employers are supposed to come forward with proposals to deal with the problem.

If they fail, the government can intervene.

The proposed law will more narrowly define trading partners - currently seven countries - as France, the Netherlands and Germany. Furthermore, when the current freeze on wages is lifted next year, the government may decide to set a maximum level for wage increases based on projections for wage growth among the three main trading partners from the Organisation for Economic Co-operation and Development and the International Monetary Fund. This will end Belgium's unique tradition of automatically indexing wages.

The government is likely to face a barrage of complaints from employers who believe the contributions they have to make to the social security system are damagingly high. Some have even threatened to relocate to other countries where the tax burden is less heavy.

However, with the government having so little room for manoeuvre, their requests are unlikely to be heeded.

## Probe into Spanish phone-taps

Spain's attorney-general has ordered an investigation into unauthorised phone-tapping by the Cossid intelligence service, which reported to have recorded conversations by King Juan Carlos as well as politicians, journalists and businessmen. The defence ministry said the tapes, dating from 1984 to 1991, were meant to have been destroyed.

Amid a fiery political row over the disclosures, Mr Narciso Serra, deputy prime minister, and Mr Julian Garcia Vargas, defence minister, are due to report on the eavesdropping activities to a closed-door parliamentary committee meeting today. The affair has brought sharp criticism from within the governing Socialist party, as well as from opposition politicians. Mr Jose Bono, president of Castilla-La Mancha and the only Socialist regional leader to win an outright majority in elections last month, said the phone-tapping was "unacceptable".

David White, Madrid

## Restraint on company chairman

Mr Guy Dejouany, chairman of Compagnie Générale des Eaux, the French utilities and communications group, has been placed under a limited form of judicial control by a French magistrate investigating corruption allegations. Mr Jean-Michel Prêtre, a magistrate from the French overseas territory of Réunion in the Indian Ocean, took the action after interviewing Mr Dejouany in relation to accusations of bribery in the award of water supply contracts in Saint-Denis, the island's capital.

Générale des Eaux stressed that the new judicial order would not restrict Mr Dejouany's ability to continue managing the group, and stressed that he had in no way been involved in any incriminating matters. Mr Dejouany is the latest in a series of French business leaders to be ensnared in corruption investigations.



## NEWS: THE AMERICAS

# Sense of betrayal in Democratic camp

President Clinton's budget cuts plan is firmly rejected by his own side, reports Jurek Martin

The "morning after" reactions to any significant presidential initiative can often be written in advance. His party will broadly support him, the opposition will not and battle will again be joined.

That was not President Bill Clinton's fate yesterday after he had told the nation in a television address on Tuesday night that he proposed to balance the federal budget in 10 years, rather than seven as the Republicans wanted.

Far more significant than the faint Republican praise for his Damascene conversion - "too little and a bit late" was the standard response - was the palpable sense of betrayal from Democrats in Congress.

The mere act of Mr Clinton signing up to the deep budget-cutting advanced by the Republicans far offset in their eyes his kinder, gentler and longer-term approach, which spared education and took less of an axe to healthcare for the old and poor.

Congressman David Obey of Wisconsin, senior Democrat on the House appropriations committee, thought Mr Clinton had again caved in to pressure. "I think most of us learned some time ago that if you don't like the president's position on a particular issue you simply need to wait a few weeks."

Congressman Richard Gephardt and Senator Tom Daschle, the two minority leaders, had earlier tried to talk the president out of his new tack. Afterwards, Mr Gephardt commented:



Daschle (centre) and Gephardt (right) failed to get Clinton to drop his new tack, while all Byrd said was "flip-flop".

"The real losers will be the elderly and the families that support them." All Senator Robert Byrd, the prolix West Virginian, could say was "flip-flop".

Congressman Donald Payne of New Jersey, head of the congressional black caucus, which has usually been in the president's corner, said: "Ten years is as unreasonable as seven to make these cuts. It's

a quantum leap backwards for social hawk."

Even Senator Joseph Lieberman of Connecticut, no flaming liberal, qualified his opinion. "I think he's being smart, but I'm afraid I'm in the minority up here." Congressman Charles Stenholm from Texas was rare in his praise. "There has to be a point when you stop saying what you're against and say what you're for." However,

the senator has long been a budget hawk.

Tensions between president and party were evident in Mr Clinton's first two years but were kept under control by the Democratic majority leadership - Senator George Mitchell and Congressman Tom Foley, the Speaker - to the point that legislation unpopular with rank-and-file Democrats, such as the North American

free trade agreement and the Uruguay Round, was passed.

Now that it is in the minority, the party's agenda seems to be diverging from that of the president ahead of next year's elections. Congressional Democrats, especially liberals, believe their best chances lie in fighting to keep the social infrastructure the party has built over the last 80 years.

They were comparing Mr Clinton's conversion to giving support to the need for a balanced budget with President George Bush's 1980 agreement to a tax increase. This flew in direct contradiction of his "read my lips, no new taxes" promise of the 1988 campaign and severely weakened his re-election prospects.

The president, on the other hand, senses a strong tide running in favour of balancing the budget among the independent-minded voters whose support he needs if he is to improve on the 43 per cent electoral share he won in 1992.

Equally, by entering the budget battle with his own, if still sketchy, plan, he may stand a better chance of modifying or stopping the most radical Republican cuts in social spending, many of which remain unpopular with weeks.

Mr Clinton is also a "policy wonk", as knowledgeable as any politician about how government actually works and what it does well and badly. To stand on the sidelines while the Republicans change its nature would surely have tested his patience.

# Chilean army defies Frei government

By Imogen Mark in Santiago

The Chilean army has taken General Manuel Contreras, the former secret police chief, into its own care, in a move that appears to challenge government authority.

The army has made no secret of its unhappiness with a Supreme Court ruling sentencing Gen Contreras to six years' imprisonment for the 1976 murder of Mr Orlando Letelier, a former Socialist minister, in Washington.

Army chief and former military ruler General Augusto Pinochet has said his forces would respect the order.

But the army mounted an elaborate operation before dawn on Tuesday to move the general from his farm in southern Chile to a naval hospital at Talcahuano, near the town of Concepcion. He was smuggled out without the knowledge of the police guards around his property.

The army also flew a decoy aircraft to Santiago, apparently to distract the press, while Gen Contreras was taken by helicopter to Talcahuano. The

army claimed later the general's health had deteriorated suddenly forcing a landing at the hospital instead of flying to Santiago.

The government was kept in ignorance of the former general's whereabouts for several hours. Mr Carlos Fierros, the interior minister, admitted that the government had "contradictory information" about Gen Contreras's movements.

President Eduardo Frei broadcast a televised message on Tuesday calling on all citizens to respect the law and democratic institutions, and to have confidence in the democratic regime.

Any questioning of due legal process "would put at risk our stability, our country's international image and our national life together".

Opposition party leaders blamed the government and the judiciary for the delay in executing the sentence, passed two weeks earlier. Last-minute appeals by the defendant's lawyers have delayed the detention order, expected to be served on the general yesterday.

# Havana permits private restaurants

By Pascal Fletcher in Havana

ing \$1 a meal in the back yard of her home in the Havana suburb of Miramar.

The government had until now been turning a blind eye to the dozens of private restaurants, known as "paladares" after a word borrowed from a popular Brazilian television soap opera, which had sprung up in homes and back yards in Havana and other cities.

Following the latest authorisation, private restaurateurs, who could include permanent foreign residents in Cuba, would have to pay a minimum monthly fee of 400 Cuban pesos (\$100).

Opposition lodges evidence to show PRI may have spent 60 times more than allowed

# Zedillo faces funding scandal in Tabasco poll

By Leslie Crawford in Mexico City

Sixteen boxes of bank ledgers, check stubs, invoices and receipts have landed Mexico's ruling Institutional Revolutionary party (PRI) in one of the more embarrassing scandals of its 66 years in power.

The boxes were presented by the opposition Revolutionary Democratic party (PRD) to the attorney-general's office late on Tuesday as apparent evidence of illicit campaign spending during elections in the south-western state of Tabasco last November.

The PRD claims the documents prove the PRI spent 237m pesos, then worth \$70m, on the governorship race which Mr Roberto Madrazo, the PRI candidate, won.

The figure exceeds the legal limit on campaign spending 60 times over, and is more than twice the amount President Ernesto Zedillo reported spending on his presidential campaign last year. Officially, the PRI spent just under 4m pesos on Mr Madrazo's campaign. He polled 290,000 votes.

"We knew very little about how the ruling party spent its money, but now, for the first time, we have documentary proof of the PRI's illegal and lavish spending in a state election," alleged Mr Andres Manuel Lopez Obrador, the defeated PRD candidate in Tabasco.

Mr Lopez Obrador has mounted a bitter attack on his PRI rival and asked Mr Antonio Lozano, the attorney-general, to investigate. Mr Madrazo has refused to comment on the allegations.

The local PRI in Tabasco said the documents were forgeries.

However, it has also filed charges in the local courts accusing the PRD for theft.

In private, government officials say they have no doubt the documents are genuine and that they were leaked by someone within the PRI who bore a grudge against Mr Madrazo.

"This is an awful scandal for [President Ernesto] Zedillo," said a senior government official. "It typifies everything the president is fighting against: dirty elections, no accountability." The official, however,

doubted Mr Madrazo would be forced to resign.

Mr Madrazo, a powerful operator in his oil-rich state, staged an unprecedented rebellion by the local PRI in January, when he came under pressure to resign following the PRD's allegations of electoral fraud.

His supporters blocked highways, closed down businesses in the state capital Villahermosa, and briefly took over the state television network to broadcast their defiance of Mr Zedillo.

Following the riots, the government claimed it had never asked Mr Madrazo to step down.

Many in government have named the scandal "Moctezuma's revenge". Mr Esteban Moctezuma, the interior

minister, has not forgotten Mr Madrazo's revolt against his central authority. Both men are rivals in their ambition to lead the national party.

"At stake is who gets to rewrite the rules for the nomination of the next presidential candidate," one government official said. Mr Lopez Obrador, meanwhile, plans to camp out in Mexico City's rain-drenched central square, the Zocalo, until the government attends to his complaints.

"The government cannot afford to ignore the accusations," said Mr Santiago Creel, a citizen councillor at the Federal Electoral Institute.

"The documentation raises questions about the source of those campaign funds."

# NEWS: WORLD TRADE

# Airbus to run military project

By Bernard Gray in Paris

chooses to buy when the project is reviewed in spring 1996.

However, British Aerospace said that Airbus would not have a 51 per cent shareholding in the new venture, which would have established as the world's second largest manufacturer of civil aircraft after Boeing of the US. An operational team has been established at Airbus' headquarters in Toulouse to prepare the next phase of the FLA programme.

The British Ministry of Defence yesterday welcomed the agreement, notably the fact that it would be under Airbus' commercial management. "The UK is actively involved in seeking to establish a way of rejoining the project," the ministry said.

Airbus management of the military project is a new phase in the 25-year history of the consortium, which has established itself as the world's second largest manufacturer of civil aircraft after Boeing of the US. An operational team has been established at Airbus' headquarters in Toulouse to prepare the next phase of the FLA programme.

The Euroflag consortium, which has been responsible for the FLA so far, is being wound up. At the same time, the feasibility study for the FLA has been completed, confirming that the aircraft will carry 25 tonnes of payload more than 2,000 nautical miles and will be able to operate from short semi-prepared runways.

The FLA will be powered by four turboprop engines and will have a four metre-wide cargo bay to allow it to carry two Land Rovers side by side.

However, the crucial test for the aircraft will come next year when the partner govern-

# Shorts wins £40m military contracts

By John Murray Brown in Dublin

Short Brothers, the British aerospace company privatised in 1989, has won two military support contracts worth £40m (\$62.8m) with Middle East customers.

The deals were announced yesterday by company president Mr Roy McNulty, during the Paris airshow and involve the maintaining of communication systems and support equipment, and training technical and maintenance personnel in several Middle East countries.

Mr McNulty said the military support business was an "important and growing market sector" for the Belfast company, and the contract would further strengthen their position.

Shorts now owned by Bombardier of Canada, also announced a missile agreement with Texas Instruments of the US, to supply the British defence ministry.

The company also announced a series of co-operative and licensing agreements and the winning of a £2.6m Ministry of Defence contract to supply the Stetson series supersonic target for air-to-air combat training.

# Deficit drove Brazil car curbs

Angus Foster on a setback to the past five years of liberalisation

Sao Paulo's Europa Avenue, nicknamed "import alley" because of its miles of showrooms for shiny imported BMW and Japanese cars, was looking decidedly lacklustre yesterday.

The Brazilian government's decision on Tuesday to set a limit on car imports this year and introduce quotas from next January has left not just concessionaries angry. A former finance minister described the measure as "an unnecessary step back". A former central bank governor said it would hurt consumers. And the World Bank's chief economist for Latin America, Mr Sebastian Edwards, described the move as a "very worrying precedent".

Mr Jose Serra, planning minister and the man most in favour of the measures, insisted they were not protectionist and formed part of a new industrial strategy for Brazil's car industry. But perhaps the most telling response was the immediate welcome the new policy received from Sao Paulo's industrial federation, a notoriously protectionist lobby.

The measures, a big setback for Brazil's five-year-old economic liberalisation, stem from a mounting trade deficit since a new anti-inflation currency was launched last July. A growing economy, overvalued real currency and consumer optimism led to a flood of imports and an accumulated deficit for the first four months of this year of \$2.79bn.

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## NEWS: ASIA-PACIFIC

# French ties cut by New Zealand and Australia

By Nikki Tait in Sydney, Terry Hall in Wellington and William Dawkins in Tokyo

Australia and New Zealand yesterday said that they were freezing all defence co-operation with France, in protest at the decision by Paris to recommit nuclear testing in the South Pacific. Japan also reacted angrily to France's decision, a doubly sensitive matter on the 50th anniversary of the atomic bombing of Hiroshima and Nagasaki.

French President Jacques Chirac announced on Tuesday that his country would begin a series of eight tests at Mururoa Atoll in September, ending a three-year moratorium. France plans to conclude the tests by May 1996, in time to sign an international test ban treaty.

Mr Yohji Kono, Japan's foreign minister, said the move betrayed the trust of non-nuclear countries, which had recently agreed indefinitely to extend the nuclear non-proliferation treaty. Mr Hervé de Charette, his French opposite number, informed Mr Kono of the decision by telephone yesterday.

In reply, Mr Kono asked the French government to reconsider the tests.

Mr Tomiochi Murayama, the Japanese prime minister, plans to raise what he called the "regrettable" decision at the summit of the Group of Seven

industrialised nations which opens today in Halifax, Nova Scotia.

The French decision provoked strong criticism among delegates at a United Nations conference on disarmament in Nagasaki. Mr Wolfgang Hoffman, Germany's representative to the UN conference on disarmament in Geneva, dubbed it "politically incorrect".

In a formal statement Mr Paul Keating, Australia's prime minister, said that Australia "deplored" the decision and was "adamantly opposed to nuclear testing by any nuclear weapon state". He added: "In recent months, we have made our opposition very clear to the French, including to President Chirac." Mr Keating is understood to have written personally to the French president, arguing against a resumption of testing.

Meanwhile, the 15-nation South Pacific Forum, whose leaders are due to meet around the time that the French tests recommence, strongly condemned the decision, saying that it demonstrated "flagrant disregard" for world opinion and that its timing was "particularly provocative".

Philippines President Fidel Ramos said: "Testing of this nature will again encourage the production of nuclear arms, which is counter-productive to the environment of peace that we now enjoy here in our region." Indonesia's Foreign Office said France was in breach of an agreement at the recent UN Nuclear Non-proliferation Treaty conference for nuclear weapons states to exercise restraint.

In a marked contrast to elsewhere, reaction from European governments was mild or non-existent. The British foreign



Dominique Girard, French ambassador to Australia, waves away reporters after meeting foreign minister Bob McMullan

office said: "We see no reason why a limited programme of tests need affect the prospects of a successful negotiation of a comprehensive test ban treaty."

For New Zealand, Mr Bolger said defence links with France, except those affecting humanitarian and UN peacekeeping roles, would be frozen. Senator Bob McMullan, Australian trade minister, said existing defence links such as training and joint maritime air surveillance would be maintained, but new ties, including defence contracts, would not proceed.

But despite the expressions of outrage, no wider trade sanctions against France were threatened yesterday, although the Australian Council of Trade Unions urged consumers to boycott French products - a tack endorsed by Senator McMullan.

"We don't intend at this stage to pursue some sort of breach of international law

that would allow us to take unilateral action against France, and if contracts have already been entered into, we're not suggesting people should breach them. But I think a lot of [Australians] will... make our disapproval effective through the check-out counter and through the way we use our money." French exports to Australia were worth \$1.6bn (£721m) in 1994.

The widespread indignation could also raise particular difficulties for Axa, the French insurance group, which is seeking to acquire a 51 per cent interest in National Mutual, Australia's second largest life company, for \$1.1bn.

The agreed deal needs the backing of 75 per cent of policyholders, and some anti-French sentiment because of the nuclear issue is already evident. This has been particularly prominent in New Zealand, where about 35 per cent of NML policyholders live.

Negotiations scheduled in a week as Tokyo seeks to head off a breakdown in relations

# Japan and US agree to resume car talks

By William Dawkins in Tokyo

The US and Japan agreed yesterday to resume talks on their car trade dispute, so disrupting the risk of the row disrupting the Group of Seven industrialised nations' summit, which opens today in Halifax, Nova Scotia.

Mr Ryutaro Hashimoto, Japan's minister for international trade and industry, yesterday invited the US to send senior officials to reopen talks in Geneva on June 22 and 23, less than a week before the June 28 deadline for US tariffs on \$5.9bn (£2.7bn) of Japanese luxury car imports. The most recent round of talks in the 20-month dispute broke down on Monday night.

The invitation partly reflects Japanese eagerness not to allow the trade row to harm other areas of its relationship with Washington. Mr Tomiochi Murayama, the Japanese prime minister, will today meet President Bill Clinton in an attempt to smooth relations, before the start of the G7 summit in Halifax. It also reflects the Canadian host government's anxiety to prevent the trade row from interfering with the summit's busy agenda.

The two leaders may today discuss cars, but will not negotiate. Mr Murayama is also expected to tell Mr Clinton that the Japanese government is prepared to make more increases in public spending to stimulate the fragile economy and curb the current account surplus.

In another gesture towards keeping the trade row at bay during the summit, Mr Hashimoto announced that he did not plan to meet Mr Mickey Kantor, the US trade representative, in Halifax. Japan would attend the next Geneva talks "without any preconditions", said Mr Hashimoto. The move was welcomed both by leading Japanese car makers and by Mr Walter Mondale, the US ambassador to Japan.

Japanese officials are aware

Mr Matsushita, governor of the Bank of Japan, yesterday repeated concerns that the economy might fall back into recession, writes William Dawkins in Tokyo. An improvement shown in a recent central bank survey of business conditions was confined to manufacturing and had yet to be felt in services industries, he warned.

"Japan's economy has been on a moderate recovery trend for the past year and a half, but recently the slowness of its tempo is particularly noticeable," Mr Matsushita told a conference. His reasons for anxiety included the yen's sharp rise, continued pressure for job reductions, and increased competition from lower-cost Asian neighbours.

ing system for countries in financial trouble, to reduce the risk of a Mexico-style catastrophe taking place among the emerging economies on its own doorstep in east Asia.

Japanese officials have fought hard for the inclusion of such a plan in drafts on which the summit communiqué will be based. Mr Murayama is also expected to support draft plans to double the emergency loans available to crisis-hit countries under the International Monetary Fund's general agreement to borrow.

In addition, Japan is eager to make its first contribution to the G7's deliberations on Bosnia. Mr Yohji Kono, deputy prime minister and foreign minister, early last month became the first Japanese cabinet member to make an official visit to Croatia, where he indicated that Tokyo was willing to help mediate in the Balkan conflict.

Mr Kono, who will accompany the prime minister in Halifax, is keen to demonstrate Japan's interest in matters outside Asia, thus bolstering its candidacy for a permanent seat on the United Nations Security Council.

## ASIA-PACIFIC NEWS DIGEST

### US urges boat people to return

The United Nations High Commissioner for Refugees said yesterday it had distributed an open letter from the US consulate in Hong Kong to Vietnamese boat people urging them to return home. The letter, signed by Mr Jeffrey Bader, acting US consul general, said the Clinton administration was opposed to US congressional proposals calling for resettlement of some 40,000 Vietnamese refugees still in Asian camps. Nearly all have been through a screening process at which they have been judged ineligible for refugee status and therefore not entitled to resettlement. Excitement over the congressional proposals has been blamed for recent unrest in detention centres throughout the region.

The US "is unequivocal in its belief that return home is the sole remaining option for those who are not refugees", said the letter. It also told the migrants that many of those who choose to go home may become eligible for legal emigration. It noted that "nearly 600,000 Vietnamese have already been resettled in other countries by applying in Vietnam to various orderly departure programmes".

Reuter, Hong Kong

**South Korean budget up 14%**  
South Korea's Finance Ministry said it would propose a budget for calendar 1996 of between Won 6.500bn (£51bn) and Won 8.000bn, a 14 to 15 per cent increase from this year's Won 4.830bn. The proposal, which will now be discussed by cabinet and parliament, was far less than the Won 7.810bn which about 40 government offices had demanded. A ministry official said the draft was based on a forecast that the economy would grow 7 per cent next year in real terms from a projected 8 per cent this year.

Reuter, Seoul

### Manila land dispute erupts

Ayala Land, the Philippines' biggest property company, is to sue the Philippine government over the bidding process for a 240 hectare site of prime Manila real estate. The contract to develop Fort Bonifacio was won in January by a 19-member consortium led by Metro Pacific, Philippine subsidiary of Hong Kong-based First Pacific. It offered 33,000 pesos (£200) per square metre for the site. Ayala Land, which came second offering 24,000 pesos, says the Metro Pacific broke the rules by submitting a flawed bid to guarantee the second

Edward Luce, Manila

Edwards will be muted.

Congressman Bill Richardson, a New Mexico Democrat, recently returned from Vietnam with 100 pages of material on the missing. "Given Vietnam's massive and recent co-operation on the MIA [missing in action] issue, I think it may be time to recognise them," he said. Vietnam also has turned over other documentation relating to more than 1,600 Americans considered missing in action.

Mr Christopher's support for recognition is reportedly based on a recommendation from Mr Winston Lord, assistant secretary of state for South-East Asia.

Opposition is politically driven and emanates from the National Security Council. However, the State Department official said that no one who opposes diplomatic ties would vote for Mr Clinton in any case.

Movement towards full relations has been urged by the US business community, which sees the former enemy as a market for infrastructure contracts and capital goods. The US is well behind Japanese and European companies in the area.

Cementing its links within the region, Vietnam is next month to become the seventh member of the Association of South-east Asian Nations.

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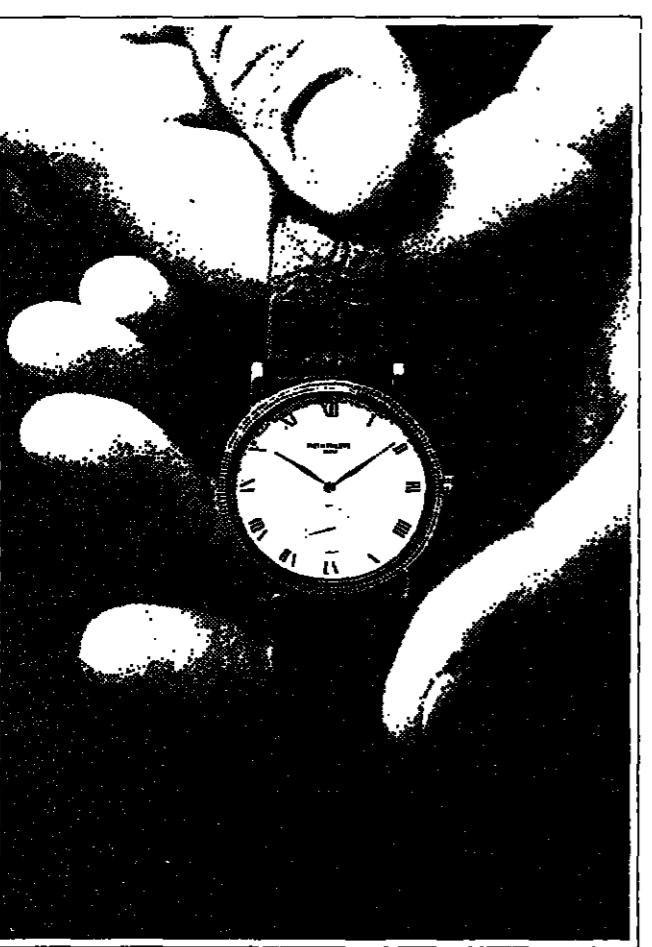
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FT Surveys

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# \$6bn new fleet deal signals revised flight plan for Saudia

Details, expected to be announced on the Saudi airline's 50th anniversary on Sunday, point toward a restructuring, writes Robin Allen



Saudi Arabia's national airline, Saudia, is expected formally to announce on Sunday, its 50th anniversary, that it will buy up to 60 long and short-haul aircraft worth some \$6bn (£3.75bn) from Boeing and McDonnell Douglas.

The order is likely to be

spread over five years or more. At the same time the airline will be radically restructured, according to bankers and industry sources.

Uncertainties over the future shape of the airline industry, as well as Saudi budget constraints, complicated the negotiations with US government

## Saudis turn to Islamic banks

By Robin Allen in Dubai

Islamic banks are expected to play a prominent role in financing Saudia's purchase of \$6bn of new aircraft over the next 10 years.

Islamic banks - and Islamic banking divisions of western banks which have greater placing power - "now have enough experience and assets to easily absorb a deal this size," according to one Saudi joint-venture banker. Islamic banks have already raised Islamic funds for aircraft leasing.

Using Islamic banks would be "politically correct" as well as practical. It would also be an innovation for Saudi Arabia, which, despite a hyper-sensitive insistence on the pre-eminence of its Islamic identity, has so far shied away from allowing domestic Islamic banks to advertise the fact, because it would draw attention to the fact that the bulk of the banking system is based on interest.

Bringing in Islamic as well as domestic and international commercial banks would also be consistent with the degree of flexibility the Saudi government needs if it is serious in its long-term plans to make Saudi commercially viable before it is privatised.

After President Bill Clinton announced last year that the two US companies had won the order, it was widely assumed by bankers and aircraft industry experts that Saudi would confirm the full \$6bn order, and that the US's Export-Import Bank (Eximbank) would finance 55 per cent of the total in export credits, with additional financing to be arranged by Chase Manhattan and Saudi Arabia's National Commercial Bank.

Few saw the difficulty posed for the Saudi finance ministry when faced with Eximbank's insistence on the blanket guarantee for the full \$6bn; even though, as a branch of the defence and aviation ministry, Saudi is entirely state-owned.

A new "serial" approach to

Saudia's aircraft orders and financing would release the

finance ministry from guarantee.

**Levels of aid for poor nations fall to 20-year low**

By Krishna Guha

Overseas development aid from the world's richest countries fell by \$5bn in 1993, the first significant fall in more than a decade, and now represents a smaller proportion of wealthy nations' GNP than at any time in the last 20 years, according to an independent report published today.

Even as the volume of aid falls, it is increasingly influenced by commercial and political concerns rather than the need for poverty relief, said the report, jointly published by the International Council of Voluntary Agencies, Eurostep and UK-based Actionaid. Agricultural protectionism, strategic concerns and desire to promote arms exports often contradict the stated goals of aid programmes.

The report, *Reality of Aid*, illustrates the gulf between promises made at the Copenhagen social summit earlier this year and actual aid flows.

In spite of longstanding commitments to the UN aid target of 0.7 per cent of GNP, the percentage fell in 14 of the 21 countries of the OECD's Development Assistance Committee, bringing the average down to 0.30 per cent from 0.33 per cent in 1992.

"Governments are in danger of giving up in the fight against absolute poverty," says Mr German.

agencies and two US companies that lasted 15 months. The latest round took place in Jeddah in the two weeks before a cabinet meeting on June 5 at which the deal is understood to have been approved. Saudia comes under the ministry of defence and aviation.

It was 50 years ago, on June 18, 1945, after a meeting with King Abdul-Aziz Ibn Saud, the founder of modern Saudi Arabia and father of the present king, that US President Franklin Roosevelt presented the king with a DC-3 Dakota, Saudia's first civil aircraft.

When on February 16 last year US President Bill Clinton announced that the US companies had won the order, it was

thought that Saudi Arabia would make firm commitments for the full order. But by the end of last month, the emphasis had changed.

The Saudi decision to buy

American aircraft - rather than, say, the European Airbus which was strongly lobbied for by the French and the Germans - was seen by Mr Clinton as Riyadh's thanks to the US for the Gulf war and his early intervention is said to have irritated the Saudis and been behind the delay.

The intention now is to

announce "serial contracts" - a

series of orders staggered over

several years.

One banker said:

The disadvantage of staggering purchases is that it adds to the \$6bn cost. Aircraft ordered in four to five years will cost more than they do today. But extended delivery schedules would give the government greater flexibility in the restructuring and privatisation of Saudia, including, it is suggested, the possibility of part of the \$6bn order going to a new airline - either to compete with Saudia on domestic routes or to act as the sole domestic carrier. This would leave Saudia free to concentrate on the profitable international routes, which would make it more attractive to investors.

Saudia does not publish its results, but aviation industry sources say it lost \$36m in 1993

on operating revenue of \$875m.

While its results are thought

not to have improved last year,

it could break even or go into

profit this year, after fare

increases that followed last

January's cuts in subsidies on

domestic flights as part of the

government's measures to

reduce the budget deficit.

Fares went up 20 per cent on

first-class domestic flights, 15

per cent on business class and

10 per cent for economy class.

Bankers at an air finance conference in Dubai in January reckoned the increases could

bring in an extra \$R250m

(\$86.7m) this year.

Saudia has a reputation for

inefficiency and for being a

bottomless pit for state money.

Up to 70 per cent of Saudia's

flights are on subsidised

domestic routes, with only a

third on full-fare international

flights but which provide two

thirds of the revenue.

"I tend to discount the gen-

eral impression of Saudia being

a bloated loss-maker like other

international airlines," said one

Saudi banker. "Saudia actually

helps the finance ministry in

some areas.

"True, it benefits from cheap

fuel supplies from state refiner-

ies. But its payments are made

on time; and what it gets in

cheap fuel supplies is offset by

what it is owed by other state

institutions whose payments

are not so timely."

Saudia has operated as a subsidised public

service. Passengers, particularly on domestic flights, have

benefited from cheap tickets.

That for years was all Saudia

could claim in its "sales pitch".

In return passengers have

put up with whatever condi-

tions they found on board. If

they are now to pay more, Saudia

has to do something to make

its services more attrac-

The first - and easiest - way

to enhance their domestic and

regional image is to replace an

ageing fleet. The second is to

introduce competition from.

The oldest aircraft in Saudia's 70-strong fleet are the

Boeing 737s. Industry sources

say these and the Lockheed

Tri-Stars in the long-haul fleet

have been in operation for 20

years. Some of its Boeing 747s

also need to be replaced.

This suggests the airline will

replace the international out-

third of its fleet with some 20

of Boeing's latest 777-200s; or a

combination of these and the

stretched 777-300X which could

take another 25 per cent pas-

enger. The latter is still on the drawing boards.

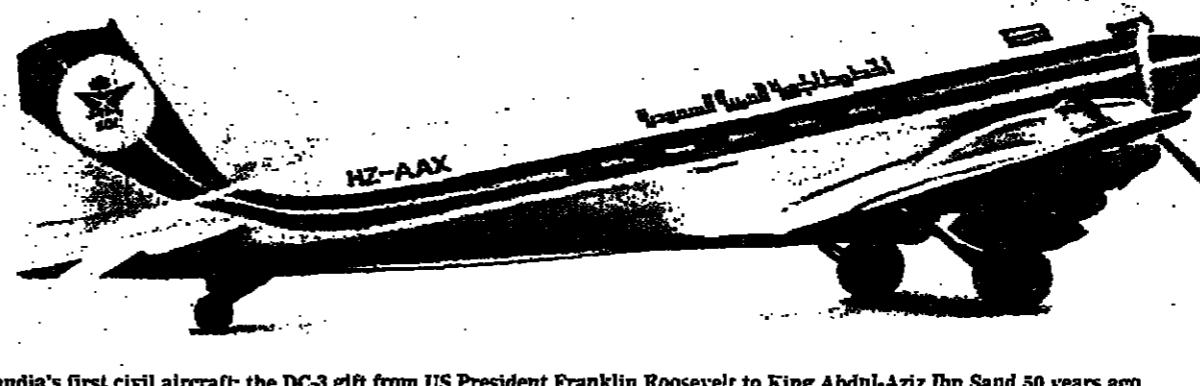
These 777s would also conform to the government's perceived need to show off the latest and the best abroad. However, since they will not be ready for delivery for several years, Saudia could buy a handful of 767s and/or the Boeing 747-400. That would leave the 110-seat McDonnell Douglas MD-90 to replace most of Saudia's 737 fleet for domestic and regional services.

Although, according to industry experts there is a "significant difference" between catalogue and end-price, the 777-200s with engines and spares would cost \$150m-\$160m each, totalling some \$8bn. The cost of six 747-400s would come to some \$800m.

The catalogue price for each MD-90 is \$32m. Engines would add another 30 per cent, and spares another 15 per cent.

This would total some \$1.1bn for 30 aircraft, a price which would rise depending on delivery dates and financing costs.

But the specifics of the pricing, or indeed the types of aircraft to be ordered, are less important for the future of the kingdom's economy and its civil aviation industry, than the prospect of wholesale privatisation of what up to now has been an indifferent state monopoly.



Saudia's first civil aircraft: the DC-3 gift from US President Franklin Roosevelt to King Abdul-Aziz Ibn Saud 50 years ago

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## NEWS: UK

Pact on EU currency destroyed by premier's failure to tame right wing

## Top ministers push for Emu referendum

By Robert Peston, Political Editor

Senior cabinet members are pushing for a government commitment to hold a referendum on sterling's membership of a single European currency as the best way to end the dispute about European Union policy which is tearing the government apart.

The prime minister, Mr John Major, is yet to make up his mind on a referendum. However, he has made clear to colleagues that he is now less likely to move his EU policy in a more anti-European direction after the mauve he received on Tuesday at a meeting of Eurosceptic MPs from his Conservative party.

"You don't behave like that to a prime minister," said a senior minister. "He could not possibly trim his approach to Europe now. It would make his position untenable."

The angry criticism which Mr Major faced in the meeting undermines a pact reached last Thursday by a meeting of the political cabinet - a full cabinet meeting to discuss party affairs - that pro-European and Eurosceptic ministers would tell their supporters on the Conservative backbenches to cease hostilities. "There was full and explicit support from both wings of the cabinet on the need to call a truce," said a minister. Now that had been thrown away.

Both the home secretary, Mr Michael Howard, and the foreign secretary, Mr Douglas Hurd, have come round to the view that a commitment to hold a referendum is the only way to draw the five of fanatics in both camps of the European argument. They face opposition from Mr Kenneth Clarke, chancellor of the exchequer.

The UK will not be forced to decide whether to accept a single European currency during

An autumn challenge to Mr John Major's leadership of the Conservative party appeared virtually certain yesterday as MPs digested the implications of his bruising clash with Eurosceptic rightwingers on Tuesday.

"There is now absolutely no chance that he can survive, because he has shown himself unable to give a lead and he has lost his authority," said a senior rightwinger previously loyal to Mr Major.

There was widespread agreement that Mr Major's position was fatally undermined at the meeting by his inability to exercise authority. Several pro-European MPs look willing to back a leadership contest. One leftrwinger, formerly a Major loyalist, said he would give his vote to any challenger who received the required number of nominations. "I fed up of waking every morning and hearing a steady drip-drip of bad news," he said.

"The prime minister has just lost all sense of crisis management. The main thing now is to get someone who can avoid a Canadian-style wipe-out."

In a prolonged and bitter debate yesterday trade union representatives at the ILO conference demanded that the British government should be punished with a "special paragraph" in the ILO's report for banning unions at GCHQ. This is the ultimate sanction that can be used against a country for violating labour standards. In recent years Myanmar, the Sudan, Panama and Ecuador have received special paragraphs for abuse of workers' rights.

But a number of governments, notably France and Germany, said they were unwilling to support a "special paragraph" for the British government because its behaviour over GCHQ was not a serious breach of labour standards.

The UK's strongest ally was the Indian government, which received a special paragraph last year for tolerating bonded labour. It supported the British government's ban on trade unionism at GCHQ.

Eurosceptics want the UK to push for repatriation of EU powers back to national governments, leaving the EU in effect as only a free-trade area.

## ILO delays action against union ban

By Robert Taylor, Employment Editor

The International Labour Organisation pulled back yesterday from censoring the British government for outlawing trade unionism at its GCHQ communications and intelligence-service station 11 years ago.

The Geneva-based body said the government should be given a "final opportunity" to resolve the issue. It proposes to create an advisory mission to examine what should be done.

Mr David Coleman, UK economist at Canadian Bank of Imperial Commerce, said the figures were "very encouraging for the inflation outlook, with earnings growth stubbornly refusing to pick up".

However, he added that the main reason for this was not hard to find. "Despite the strong recovery last year, uncertainty in the job market has remained ripe," he said.

"Hardly any day passes without some announcement of job

## Flat earnings growth applauded in City

By Gillian Tett, Economics Staff

Average earnings growth remained flat last month, official figures showed yesterday. The data was greeted with joy in the City, where many economists had expected it to rise. Indeed, with earnings growth remaining very low by historical standards, economists said the data should give a powerful boost to the government's attempts to keep inflation low.

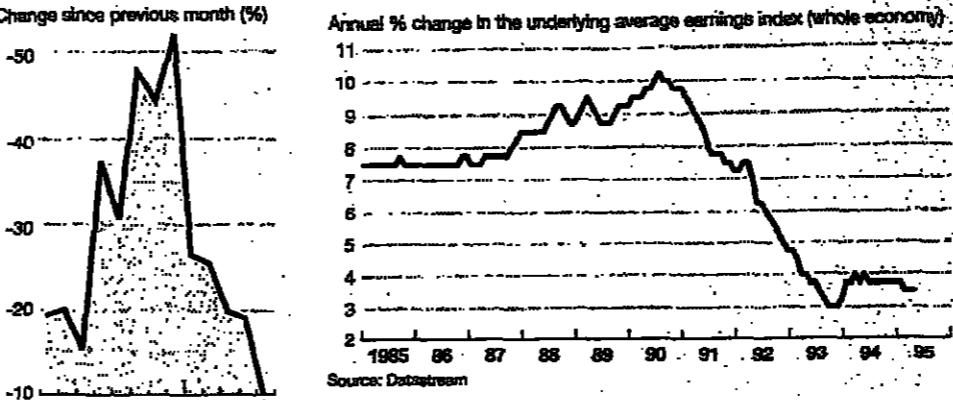
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However, he added that the main reason for this was not hard to find. "Despite the strong recovery last year, uncertainty in the job market has remained ripe," he said.

"Hardly any day passes without some announcement of job

### Unemployment

Change since previous month (%)



Source: Datasream \* provisional

### Pay rises on a low plateau

Annual % change in the underlying average earnings index (whole economy)



Source: Datasream

below the level seen in the second half of last year.

The lowest level of earnings growth occurred in the service sector, where wages increased at an annual rate of 2.75 per cent - slightly higher than the previous month. Earnings growth in manufacturing was unchanged at 5 per cent, while

in the production industries it fell back slightly from 5.25 per cent to 5 per cent.

• The Trades Union Congress is becoming increasingly concerned that the economic recovery is slowing down, our Employment Editor writes. Mr John Monks, congress general secretary, said yesterday that the latest employment figures were "dismal".

## Ethnic minorities protest at change in business aid

By Simon Kuper in London

Ethnic minority organisations have suffered a drop in government funding since the Single Regeneration Budget was introduced last year, a report from the Black Training and Enterprise Group, a voluntary organisation, says today. The SRB includes 20 previously separate funding programmes worth a total of £1.4bn (\$2.2bn).

The report focuses on bids for SRB funding in the Merseyside and the west Midlands areas of England. It says none of the seven "black-led" bids in the west Midlands won funding, while only one Merseyside bid mentioned any ethnic groups as main partners.

The report said ethnic minority organisations had trouble attracting SRB funds because they tend to lack the funds and time to assemble the complex bids the process requires.

Mr Santino Deng, co-ordinator of the Midland Refugee Council, said his council lacked the expertise to complete the compulsory business plan. It also found difficulty in submitting 10 copies of the bid of 30 pages each, as required.

The report says the municipal authorities and employer-led Training and Enterprise Councils, which lead most SRB bids in England and Wales, often avoid ethnic organisations as partners in the belief that they are unprofessional.

Bid leaders either fail to consult them or consult them too late.

Mr Javed Bashir, vice-chairman of the Keighley Asian Consortium in northern England, said: "There's never been a translation of SRB leaflets into any of the minority languages. Many of the organisations are very much in the dark about what kind of process the SRB is." He said many found out too late to submit bids.

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## NEWS: UK

## UK NEWS DIGEST

**Banks agree to heed warning on size of bonuses**

The City of London's leading investment banks promised to heed warnings by the Bank of England, the UK central bank, that the bonuses they pay to traders and other executives are too high. Mr John Manser, chairman of the London Investment Banking Association, said the central bank was right to remind the boards of companies and senior management about pay. "Remuneration excessively dependent on short-term returns may create a bias towards risk which is undesirable."

Mr Manser, who is also managing director of Robert Fleming, said investment banks were addressing concerns about incentives by ensuring a component of pay which was linked to the long-term performance of the company. He was responding to indications of growing Bank of England concern about the perverse effects of some bonus systems. Mr Andrew Jennings, a bank official, said earlier this week the bank would prefer to see remuneration take account of the stability of profits, as well as their level.

*Nicholas Denton and Gillian Tett*

**Chocolate bends for engineers**

Chemical engineers at Cambridge University have invented a form of "flexible chocolate" that can be bent, twisted and tied into knots. Nestle of Switzerland, the world's largest chocolate company, is interested in the commercial aspect of the process. Mr Malcolm Mackley and colleagues made their discovery using high-pressure injection equipment for plastics. They put solid chocolate chips into a barrel and forced the material through a nozzle at pressure described as being equivalent to having "a full-grown elephant standing on your foot". The chocolate emerges as a flexible string which gradually hardens over an hour or so. Confectioners could use the technology to make intricate chocolate shapes impossible with the conventional process of moulding melted chocolate.

*Clive Cookson, Science Editor*

**Rail bid from France**

Managers at South West Trains, one of the first three state-owned train operating companies to be offered for sale, have teamed up with a large French transport group to stage a buy-out of their business. The management team has agreed a joint venture with CGEA, a company which runs rail services over 1,000km of track in France as well as operating 5,000 buses. It employs 12,000 staff. This is the first time that a management buy-out team has joined forces with a commercial company to make a bid for one of the British railway franchises. The buy-out bid, which is due to be submitted by May 28, will include an offer to all employees to become partners in the business. SW Trains, which operates in south-west England, is the largest of the three franchises on offer in the first wave of privatisation.

*Charles Batchelor, Transport Correspondent*

**TV revenues estimated**

Commercial television in the UK, in all its forms, is worth more than £2bn (\$4.7bn) a year, says the Independent Television Commission which has combined the figures for the first time in its annual report. The ITV network, the direct commercial opponent of the BBC, had revenues of £2.1bn and was the largest operator. On an individual company basis, however, British Sky Broadcasting, the satellite venture in which Pearson, owner of the Financial Times, has a significant stake, had the highest income. The biggest stake in BSkyB is held by Mr Rupert Murdoch's News Corporation. Total advertising revenue for commercial television was £2.057bn last year, 10.9 per cent up on 1993.

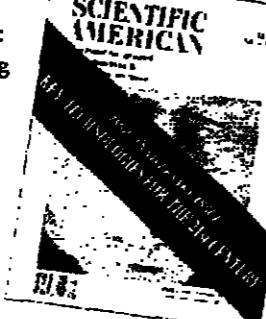
*Raymond Snoddy, Consumer Industries Staff*

**Winner loses:** The home of a winner of the top prize in the National Lottery was burgled while he was in hiding at a secret address to escape publicity about his £11m (\$17m) prize. Police in the town of St Leonards in south-east England said an "untidy search" had been made of the flat belonging to Mr Mark Gardner and a video recorder had been stolen.

**Drugs crackdown:** 12 people were arrested in simultaneous raids by 160 police in several towns in north-west England in an operation against an alleged international drugs and fraud empire. Drugs and equipment used in the manufacture of Ecstasy were found.

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**Gerry Adams says British are making unacceptable demand for 'surrender' of weapons by IRA**

**PM to meet Clinton on Ireland deadlock**

By John Kampfner at Westminster and John Murray Brown in Dublin

towards healing a rift over Northern Ireland policy.

Both sides acknowledged that Mr Clinton, in a speech at an Irish investment conference last month, moved closer to the British line that the IRA must begin "decommissioning" its weapons before full talks with Sinn Féin could begin.

That conference was dominated by a meeting and handshake between Sir Patrick Mayhew, chief Northern Ireland minister in the British government, and Mr Gerry Adams, Sinn Féin president.

Since then, however, little progress has been made, with the UK government making clear it is for Sinn Féin to move on the arms issue. Mr

Mr Gerry Adams alleged in *The Irish Times*:

- There are approximately 16,000 members of the British army still involved in military operations.

- There are massive military encampments throughout the six-county statelet [Northern Ireland].

- There are 13,000 heavily armed members of the RUC [the Northern Ireland police], a para-

military force which has acted as the armed wing of unionism and which is totally unacceptable to the nationalist community.

- There are approximately 120,000 licensed weapons, most of them in the hands of the unionist [pro-British] community.

- The British government has made no move to deal with the reality that there are hundreds of political prisoners held in British jails."

he wants to visit Ireland, north and south, in the coming months. But his officials have been unable to agree dates with the British and the trip is now unlikely to take place before November.

Both sides denied that the meeting was anything more than a question of scheduling.

"There is absolutely no political flavour about this," said a US official. Mr Clinton, he said, intended to visit Dublin, London and probably Belfast. "We have smoothed over the scar tissue," said a US official.

"There is certainly concern at the pace of events, it seems that some aspects have reached an impasse, but this is not directed at the British."

Adams emphasised in a long article in yesterday's issue of the Dublin-based *Irish Times* that he had no intention of doing so, and blamed the British for the deadlock.

Mr Adams said the British government was seeking a "gesture which would symbolise an IRA surrender". He added: "Sinn Féin cannot

deliver an IRA surrender; that is the reality." Surrender, or decommissioning, was never mentioned by the British during secret talks with Sinn Féin before the IRA ceasefire last August, he added.

"Had a surrender of IRA weapons been imposed as a precondition to peace negotiations, it is possible that there

would have been no IRA cessation," Mr Adams' remarks were seen as his clearest riposte to British demands for movement on the arms issue.

US officials have attempted a series of low-profile visits to Northern Ireland to persuade Sinn Féin to break ground over decommissioning. Mr Clinton has indicated that

**Buyer of shipyard sells offshoot to Dutch group**

By Chris Tigha in Newcastle upon Tyne and Ronald van der Krof in Amsterdam

The company which on Monday bought the main Swan Hunter shipyard in north-east England has sold its own nearby fabrication facility to a Dutch company.

THC Holdings (UK), which bought Swan Hunter's yard a week before the entire contents were to be auctioned, has sold its main subsidiary, THC

Fabrication, to Heerema Fabrication Group. THC Holdings is based in Jersey, largest of the Channel Islands between England and France.

Mr Glen Wilson, THC's commercial manager, said it was pure coincidence that the yard purchase and the sale of THC's facility had occurred on successive days, but he conceded the timing was "bloody lousy". Negotiations with Heerema started almost a year ago, he said. "We had decided not to sell but they came back to us again."

Mr Wilson declined to disclose the sale price. Heerema Fabrication Group, based in Zwijndrecht near Rotterdam, said the company had paid "several tens of millions" of guilders. Mr Wilson, a key figure in THC's negotiations to acquire the Swan Hunter yard, said the sale of its own facility did not affect THC's plans for the yard. The deal would allow THC to concentrate on revitalising the shipyard to cater for the expanding new market for floating oil production

platforms. Heerema and THC are discussing possible future co-operation to develop Swan Hunter for the construction of floating production storage and offloading vessels. Mr Wilson said: "Rather than jeopardise the capability of the project, it will be further enhanced by Heerema's strength as a major contractor in our industry."

THC already has Dutch links - its managing director is a Dutchman, Mr Jan Veldhuijzen, and its majority shareholder, whom Mr Wilson declined to name, is also Dutch.

Heerema Fabrication is part of Heerema Offshore Construction Group, a privately owned Dutch company. The main Heerema group, which is based in Leiden, is active in offshore construction and heavy-lifting shipping. It has a worldwide workforce of more than 4,000. THC's Hartlepool facility will complement existing Heerema yards in Norway and the Netherlands.

**SPOT THE REFUGEE**

There he is. Fourth row, second from the left. The one with the moustache. Obvious really.

Maybe not. The unsavoury-looking character you're looking at is more likely to be your average neighbourhood slob with a grubby vest and a weekend's stubble on his chin.

And the real refugee could just as easily be the clean-cut fellow on his left.

You see, refugees are just like you and me.

Except for one thing.

Everything they once had has been left behind. Home, family, possessions, all gone. They have nothing.

And nothing is all they'll ever have unless we all extend a helping hand.

We know you can't give them back the things that others have taken away.

We're not even asking for money (though every cent certainly helps).

But we are asking that you keep an open mind. And a smile of welcome.

It may not seem much. But to a refugee it can mean everything.

UNHCR is a strictly humanitarian organization funded only by voluntary contributions. Currently it is responsible for more than 19 million refugees around the world.

UNHCR Public Information  
P.O. Box 2500  
1211 Geneva 2, Switzerland



United Nations High Commissioner for Refugees

Photo courtesy of The LEGO Group

Bernard Hooper is looking for the end of the commercial rainbow at Halfpenny Green airfield. In dishevelled second world war buildings in the countryside west of Birmingham, where the sound of light aircraft mixes with the noise of his engines, he is working through the problems of creating a new diesel engine for the small cars of the next century.

Around the world there are many small - and even not so small - engineering concerns and inventors exploring alternative combustion technologies and engine concepts. Almost without exception they have found the task of producing engines with a genuine competitive advantage over conventional petrol and diesel units both long and frustrating. No important car maker so far has seen fit to use one.

Despite this, Hooper and his backers believe their time may have come, on the grounds that even the current crop of small, high-revving four-stroke diesels fitted to cars such as the Ford Fiesta and Citroen AX will prove too big and heavy for forthcoming generations of ultra-lightweight small cars.

Size for size, current four-stroke diesels are inevitably heavier than their petrol counterparts because the block and cylinder head have to withstand combustion chamber compression ratios almost double those of a petrol engine. Add valves, camshaft and the camshaft drive components needed on any four-stroke engine, and fitting such a unit under the bonnet of the ultra-small cars of the future will undoubtedly prove tricky.

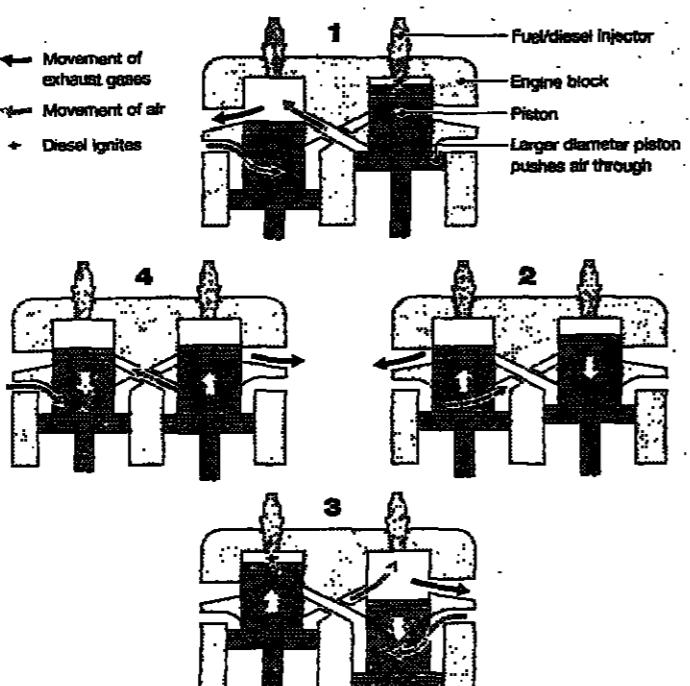
In addition, diesels are facing trouble meeting tighter exhaust emission standards planned for later this decade, and will almost certainly require an exhaust catalyst to do so.

Hooper, his son Peter and a small team of technicians maintain that all these problems can be overcome by the engine they are developing. It is a two-stroke with a stepped piston design which, in the ideal world that has so far failed to materialise for so many engine innova-

# Stepping forward

John Griffiths and Paul Cheeseright on a possible breakthrough in two-stroke engine design

## Blueprint for a new diesel engine



Source: Bernard Hooper Engineering

tors, they would like to see in mass production within 10 years.

The technical crux is to achieve compact, low-exhaust emissions, low fuel consumption but high durability and no diminution of performance.

There are several counts on which the Hooper engine might prove interesting to car makers. One is the very fact that it is a

diesel form. It is the Hoopers' extra ingredient, the stepped piston design, which is claimed to get round the big, age-old problem with the two-stroke that is partly responsible for unacceptable high emissions of oxides of nitrogen.

"The Achilles Heel of the two stroke engine is that all fuels go through the crankcase," says Hooper. "They are transferred to the cylinder. You cannot separate the lubrication from the combustion, so the oil ends up in exhaust. If you cut the oil down, the engine fails. The stepped piston engine separates the lubrication from the breathing, the combustion. So you

The stepped piston engine is of simple design with a small number of individual components. It has two diameters, the smaller being effectively a normal piston as used in a conventional ported two-stroke engine. The larger diameter section, at the bottom of the piston, acts as the compression piston. The intake charge is drawn into the annular space controlled by reed valves. These valves close automatically when the piston reaches bottom dead centre and is on the point of rising again. The intake is discharged through ports into the combustion chamber of the other cylinder, scavenging exhaust gases in the process. This continues until the exhaust ports are closed by the rising piston and compression begins.

can use lubrication without causing emission problems."

Hooper, formerly chief designer of Villiers Engineering, has been working on stepped piston engines for nearly 30 years. The idea itself dates back to the first world war but, like many other alternative engine concepts, it went undeveloped for decades. Hooper, who holds a clutch of patents, licensed the technology to Norton Villiers, the motorcycle group, during the 1970s. Later, he has worked on government contracts.

The stepped piston work is backed by the Dunlops, a Scottish

family with whisky interests. Since 1982, the Dunlops have held the licensing rights for the new engine. Nicholas Dunlop is now working full time for Stepped Piston Engines, which aims to see the engine brought into production. Dunlop's aim is to bring the engine into the automotive mainstream.

Dunlop talks of a co-operative arrangement with Bosch of Germany on injection systems, of talks with Lucas, the UK group with its own diesel injection system, of discussions with the piston products group of T & N, another UK group, and of some form of intellectual property sharing with AVL, the Austrian consultancy. Engine technology is a field where the industry likes to keep its lines of communications open.

But the experiences of other aspiring engine "breakthrough" concerns, such as Australia's Orbital Engine Company and Sonex of the US, underline the challenge facing Hooper. The Orbital two-stroke engine concept has been

designed to move earth from the skies

The large, powerful equipment used to move earth is difficult to manoeuvre accurately. But a US-based consortium is combining computers, lasers and global positioning system satellites to develop highly precise controls.

Leica, the Swiss optical company, Caterpillar, the US earth moving equipment company, and Spectra-Physics Laserplane, a controls company, are developing computer-aided earth moving equipment. The two-year project is also being funded by the NASA Ames Research Center in California.

The equipment will use digital radio links from the aircraft to ground stations, from which calls are routed via national telephone networks. The cellular technology is cheaper and simpler than the ground-based laser beams.

Leica: US, tel 310 7915300; fax 310 7916108

## Culturing mammalian cells

Scientists in Switzerland have developed a technique for culturing mammalian cells which could make it easier to manufacture certain protein pharmaceuticals, such as monoclonal antibodies.

The Swiss Federal Institute of Technology in Zurich used genetic engineering to modify mammalian cells so they can grow without added protein or animal serum. The technique is being commercialised by Cytos Biotechnology of Zurich.

Cytos: Switzerland, tel 1 633 3170; fax 1 633 1051

## Portable surface penetrating radar

Surface penetrating radar equipment has been used to detect

licensed to a number of car makers for several years, and as recently as three years ago Ford was indicating that there would be Orbital-engined Fiestas on the road by the mid-1990s. Emissions-related problems have pushed that possible introduction to near the end of the decade.

Orbital is already a large, respected company with its engines - in other applications such as marine - in current production. Yet it, too, has found that when it comes to cars and the complex legislation that surrounds them, it is a very long road indeed between concept and commercial production.

could lose out as a result of the government's growing emphasis on applied research and development and "wealth creation".

Lord Butterfield summed up the committee's views: "We commend the government for putting in place the NHS R&D strategy but we are anxious about the operation of that process lower down the management line." More junior managers were still liable to regard research as a costly burden on scarce resources.

But the Lords are concerned that

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Clive Cookson

Medical Research and the NHS Reforms, HMSO, £18

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# The 'outsider' version of history



I suppose it is inevitable that anyone writing their memoirs is bound to indulge in a certain rewriting of history.

**THE PATH TO POWER**  
By Margaret Thatcher  
HarperCollins £5.00, 656 pages

public expenditure were very strong. She is at pains to describe the mistaken policies of all postwar UK governments, particularly Conservative ones which should have known better. She is contemptuous of the records of two of her predecessors: Harold Macmillan and Edward Heath.

Yet in the Heath government she and Sir Keith Joseph were not only the big spenders they constantly demanded more. She recounts with understandable pride how she persuaded both Edward Heath and his cabinet to give her "almost everything I wanted for the school building programme". Her disavowal of her own (and Sir Keith's) past profligacy was one of the causes of the subsequent bitterness with Edward Heath.

The second part of the book purports to deal with the period after she ceased to be prime minister. In fact, it is much more an account of her well-known views on a range of issues such as Bosnia, the Maastricht treaty, sterling's withdrawal from the Exchange Rate Mechanism, and public expenditure.

On the European Union and Maastricht she states she "has fought many battles", but fails to admit that in the end she lost most of them. I remember well her saying she would not rest till the Common Agricultural Policy was destroyed, but 16 years later it is still very much alive.

Maastricht she terms a treaty too far. However, her record suggests she would have accepted the treaty at the end of the discussions - and most probably won fewer concessions than John Major, because of her strategy.

She relaunches the idea of the North Atlantic Free Trade Area to encompass North America and Europe including the eastern European states. The knowledge that neither the US nor our European partners

ers are interested is no deterrent and one is left with the overwhelming impression that she is returning to her anti-EU posture.

However, despite all my disagreements with her over policy, I believe she handled the difficult task of leader of the opposition with skill. She always displayed great loyalty and consideration to her secretaries, nannies and friends - as also to her colleagues in the shadow cabinet, only a few of whom were her supporters.

Her convictions were always strong and her capacity to absorb briefs down to the minutest detail phenomenal. I never knew her come to a meeting without a sound knowledge of the subject under discussion. The problem was much more one of restraining her until the initiator of the paper had finished.

I found the account of her childhood and upbringing most interesting and rather moving - and much too short. But it is possible to understand much better what gave her the ambition and the convictions to succeed and to become the longest-serving prime minister this century. Her love for and dependence on Denis, her husband, shows through in chapter after chapter and no one will gainsay how lucky she was to have him, and how well he has played his part.

I presume this is the last volume of her memoirs, and now history must be left to decide the weight of her considerable contribution. Lady Thatcher believes socialism has been defeated once and for all and this is her proudest achievement. I hope she is correct, but in her praise for Tony Blair, the Labour leader, is she not just extolling the virtues of One Nation Conservatives? It would be an odd twist of fate to create a new One Nation party when you have destroyed your own.

**Lord Prior**

The reviewer was a cabinet minister under Sir Edward Heath and Lady Thatcher. He is chairman of the General Electric Company, the defence and electronics group.

**T**he link between money and prices is about the oldest proposition in economics. But the correct statement of that link has proved elusive and the distinguished contributors to a new symposium differ widely. (*The Quantity Theory of Money*, Edward Elgar, £39.95).

The contributions begin with an account by Walter Eltis of how John Locke, the English philosopher, used the Quantity Theory to put England on a sound money basis 300 years ago. Among other contributors, Mark Blaug writes on the logical issues raised; and Geoffrey Wood draws morals from the very limited success of the 1880 monetarist experiment.

The original Quantity Theory of money was designed for a gold standard world. It first flourished in the 18th century when gold and silver discoveries in the new world led to price inflation in Europe. It was used to denounce the notion that a nation's wealth depended on the amount of precious metals it had.

At a national level, an increase in the amount of gold or silver would leak out to the rest of the world through the balance of payments. At a world level (and the world was for practical purposes France, Spain and Britain), a doubling of the amount of gold would eventually be dissipated in an approximate doubling of prices measured in gold units.

The moral was that a country wanting to prosper had to rely on its own industry, enterprise and thrift rather than on ingenious devices for getting hold of more bullion. The theory also cautioned against policies such as issuing large amounts of paper money or clipping coins, all of which amounted to the imposition of an inflation tax by the sovereign on the people.

The same logical apparatus could be applied in the gold standard world of the 19th and part of the 20th century. It is only since the last links with gold were broken that monetarism has come into its own as a proposal for controlling the amount of fiat money (that is, money not convertible into anything intrinsically valuable).

This whole branch of thinking could be made less arcane and brought nearer to ordinary experience by asking a few simple questions. How much is a household likely to spend? The instinctive response of many will be: "It depends on how much money it has."

This is apparently game, set and match to the monetarists. But explore a little deeper. By this answer, people do not literally mean how much cash and bank deposits they hold. They are more likely to mean some combination of their regular income and their wealth in the form of houses, financial assets and so on.

The monetarist then has a more difficult task - to show that large changes in nominal income or wealth ultimately depend on the behaviour of the banking system, which is in turn under the influence of official policy. This is more difficult, but possible.

More needs to be said. Surely if people are optimistic and full of animal spirits, they will try to borrow more and spend more, for any given level of income and wealth. If, as now, they feel pessimistic and depressed, and aggressively disposed towards business, they will fight attempted price increases by shopping around rather than by borrowing from banks. Why deny that this moral music has influence?

What monetarists need to assert is that central banks can stop either mood from going to excess. The power arises from the fact that commercial banks tend to keep reserves with central banks. The latter can by their own lending and borrowing operations increase or decrease the quantity of these reserves and thus increase or reduce the ability of banks to lend.

Where there is a danger of a deep recession it may not be enough to supply commercial banks with reserves on easy terms. There may be a case for scattering money to the people, either by dropping it from helicopters, as Milton Friedman proposed, or by burying it in the ground and leaving it to the profit motive to dig it up, as Keynes once suggested.

Is there any difference between the quantity theory of money and monetarism? The quantity theory conjures up a vision of rustling academic gowns and long time series

## ECONOMIC VIEWPOINT

# Achieving stability

By Samuel Brittan



What are we left with? We need some method of allowing the economy to breathe, that is to allow the inflation rate to vary from year to year without taking off into the stratosphere. Geoffrey Wood comes nearest to this approach when he cites the proposal of Bennett McCallum, a US monetarist writer, that central bankers should vary the growth rate of the monetary base "in response to deviations of nominal gross domestic product growth from some desired rate". That rate should be "the economy's trend real growth rate plus some modest inflation".

At least the signals then point in the right direction. Policy is aimed very severely against inflation in times of growth and becomes stimulatory in a recession. But the authorities do not have to answer impossible questions such as "Is excess capacity above or below the safety level?" Nor is there any reason why central bankers should go mechanically by the past. They can, for instance, take into account such forward-looking information as they can find from financial indicators such as bond rates, commodity prices and exchange rates.

The approach through nominal GDP has so far not won favour with policymakers because it has been treated as another technocratic gimmick and not as an intellectual tool for use in the medium term. But a fresh start is nevertheless required with less accumulated intellectual baggage and more openness to common sense.

## LETTERS TO THE EDITOR

Number One Southwark Bridge, London SE1 9HL

We are keen to encourage letters from readers around the world. Letters may be faxed to +44 171 873 5938 (please set fax to 'fine'). Translation may be available for letters written in the main international languages.

### Subsidised art leads to narrower choice

From Mr David Sawers.

Sir, Michael Prowse omitted one argument against subsidies for the arts in his assault on this misuse of taxpayers' funds ("Shakespeare didn't need a subsidy", June 12). Subsidised art tends to drive out unsubsidised art so the choice of art available to the consumer will be narrowed. The development of the arts is all the more likely to be determined by the tastes of those who dispense the subsidies, and the commercial sector becomes increasingly limited to popular works that the subsidised sector spurns.

In the UK, new productions of plays are increasingly financed, wholly or in part, by the subsidised sector because it has access to free money, and partnerships between commercial and subsidised companies therefore increase the potential profitability of any venture. The beneficiaries from the system claim that this development shows that the theatre cannot exist without subsidies, although it merely demonstrates that businesses use the cheapest source of capital. Subsidised companies can thus

largely determine what plays get produced in the UK.

In the US, subsidy does not have this influence over the arts. But the publicly supported television that Michael Prowse enjoys was blamed for the failure of the privately financed arts channels a decade ago: few viewers were willing to pay the substantial subscriptions demanded by the arts channels when public service television was free. In the UK, the existence of the tax-financed BBC similarly hampers the development of commercial arts channels; and the commercial services offer something different from the BBC.

Intellectuals on both sides of the Atlantic can then agree that commercial television is appalling, and only state finance can provide a decent service. But eliminating state finance might provide them with a better service - as well as enriching the taxpayers.

David Sawers,

"Crosby",  
10 Seaview Avenue,  
Angmering-on-Sea,  
Littlehampton,  
West Sussex BN16 1PP, UK

### Priority of G7 countries should be to put their economic houses in order

From Mr Rahmi M. Koç.

Sir, The most urgent problem facing the G7 summit is the currency turbulence that is playing havoc with corporate investment and profit margins.

In our annual statement to the summit handed over to the Canadian prime minister in Ottawa last week, the International Chamber of Commerce said the best means open to the seven governments to restore stability in currency markets and promote solid world economic growth is for each to put its own economic house in order. Priority number one is to correct the financial imbalances that are at the root of the present currency instability.

Who should do what? The impression that the US Congress is still bent on cutting taxes rather than expenditure has unnerved financial markets. What the US should do is take firm measures to increase its savings rate and tackle its chronic current account deficit. And while Canada has been taking steps in the right direction, there is also still too much red ink in its accounts.

Japan is not a passive victim of the rising yen. For too long its economy has been over-gearred towards exports. It has only itself to blame for the

slow pace of deregulation which is preventing its economy from adapting to the new world of the 1990s. That needs changing fast.

In the European Union, the principal failure is endemic unemployment, which has been getting worse with every business cycle. The welfare state is fine for those in jobs, but is less attractive when it becomes an impediment to job creation. A bold approach is needed to loosen rigid labour laws and practices, tackle distortions of wage differentials, reduce regulation of business, and bring down non-wage labour costs.

Finally, all the G7 countries must get to grips with the stock of public debt, which in recent years has exploded to average about 70 per cent of collective gross domestic product in the OECD area.

This will require hard domestic decisions. It would be churlish to begrudge the G7 leaders their trip to Halifax. But they should remember that sound economic policy, like charity, begins at home.

Rahmi M. Koç,  
president,  
International Chamber of  
Commerce,  
88 cours Albert 1er,  
75000 Paris, France

### Cultural mismatch over names

From Mr Malcolm R. Dale.

Sir, If the English want to be snide about French culture they should get their own right first. Reporting that France "is suffering an invasion of Anglo-Saxon first names", Observer ("Kevin, n'est-ce pas?", June 13) gives three examples - none of which is Anglo-Saxon. Pauline dates

back to the Roman Empire (and was the name of Napoleon's sister); Laura is Italian, with long French associations (remember Petrouchka in the *Vauclusé*?); and Kevin is Irish.

It should be obvious which culture has been "invaded".

Malcolm R. Dale,

403 South Union Street,  
Alexandria VA 22314, US

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Malcolm R. Dale,

403 South Union Street,  
Alexandria VA 22314, US

### No chance to shop around

From Mr Richard S. Henderson

Sir, I note from your article "Higher carbon tax heats up debate" (Business and the Environment, June 14) that Angela Merkel, the German environment minister, says the Danish case emphasises a need for "further harmonisation of the European tax system" to prevent citizens from shopping around the internal market".

This may come as something of a surprise to those of your readers who might have supposed that shopping around

was precisely what markets were for.

A brief exposure to German state-regulated shopping hours, which are clearly designed to prevent shopping around, or indeed shopping at all, would rapidly demonstrate that Angela Merkel's attitudes are, however, entirely in line with existing German practice generally.

Richard S. Henderson,

Heinestrasse 10,  
D-60322 Frankfurt,  
Germany

by the ceasefires we are seeing increased visits from potential investors and many more phone calls to our overseas offices.

Indeed, I have just returned from Washington where President Clinton and his administration organised a trade and investment conference to help

us build in this new time of opportunity.

The news does not seem to

have reached the Financial

Times, where every map and

table in your relocation

supplement of June 9 totally

ignored Northern Ireland's

existence.

In the new climate created

don't want it to be kept a secret.

Denison minister for the economy and agriculture.

Department of Economic Development, Northern Ireland, Belfast BT2 4JP.

As the best opportunity, we

have the opportunity to help

investors to invest in Northern Ireland.

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## FINANCIAL TIMES

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Thursday June 15 1995

## The challenges facing the G7

Too much should not be expected from this year's summit of the group of seven leading industrial countries meeting, which begins in earnest today in Halifax, Nova Scotia. Even so, it still has plenty to do.

For several years the summits were dominated, rightly, by the need to complete the Uruguay round of international trade negotiations. Last year, in Naples, the decision was taken to address the reform of other international institutions, including the World Bank and the International Monetary Fund. The Mexican peso crisis has made this choice appear prescient.

To judge by the communiqué leaked to the press late last week, pre-summit negotiations among senior officials have achieved considerable agreement. Strengthening the IMF's surveillance and demands for transparency fall under the head of preventive medicine. Doubling the \$28bn currently available under the General Agreement to Borrow should be regarded as emergency treatment.

The case for improved prevention is overwhelming. When it comes to treatment, however, misdiagnosis carries risks. In principle, the largest pool of emergency funds that is being proposed would be used to assist countries facing liquidity crises, rather than problems of insolvency. For maximum effectiveness, the funds are intended to be granted both more quickly and with more strings attached. These conditions appear contradictory. Either the IMF can move more quickly, or it can be more fastidious in its demands, but it is unlikely mid-crisis, to manage both.

An even more important worry is whether the line between illiquidity and insolvency can be drawn. Significant liquidity problems usually arise from doubts about solvency. Where insolvency is indeed the problem, a better solution would be via formal debt restructuring, a possibility the G7 seems set to explore.

### Degree of caution

Helping developing countries to emerge is as important as stopping the emerging from submerging. The lack of a detailed analysis of the World Bank - and likely absence of agreement on reform of the United Nations - is regrettable.

## Mr Clarke's new targets

A malign fate usually catches up with chancellors of the exchequer, unless they move on briskly, as John Major did after he put sterling into the ERM. This is, after all, among the most exposed jobs in British politics. Kenneth Clarke's response to the risks he runs is endearing robust. Yesterday evening, at the Mansion House, he set out his "no-nonsense approach", based on the - the absolutely correct - conviction that the one thing the UK does not need is another "politically motivated dash for growth".

The operational heart of the speech was the commitment to set interest rates at the level judged necessary to achieve the inflation target of 2½ per cent or less. To rub in the point, the governor of the Bank of England said that it is by this target that "we expect our policy advice to be judged". Mr Clarke added that pursuit of this target should ensure that inflation will remain in the range of 1-4 per cent.

Apparently, he means that, in the real world, pursuit of inflation of less than 2½ per cent might, from time to time, lead to inflation higher than that. He is right.

The statement that this target will run beyond this parliament must be taken with the broader commitment to sound public finances and a stable economy. The overall approach is intended to satisfy two different audiences.

### Battle for credibility

People engaged in the financial markets search for signs that the chancellor is taking risks with inflation. Both the level of long-term interest rates and the gap between yields on index-linked and conventional gilts show the battle for credibility has still not been won. If the government is serious about achieving its targets, that lack of credibility will impose a cost on the economy, via higher than needed expected real rates of interest.

Indications of disagreements with the governor of the Bank of England are exhaustively examined. Has he gone soft, ask the markets, or are these merely technical disputes? Much will depend on how sound his judgments turn out to be when they diverge from the Bank's. Yesterday, he merely stated that he and Eddie George "have friendly, constructive, occa-

ble. A commitment to assessing the problems created by debt owed to multilateral institutions would be welcome. But a degree of caution is sensible, since the G7 may propose, but it is the wider world that disposes.

Reform of international institutions requires the assent of countries not represented in Nova Scotia. So should the whole world, or at least a fairer representation of it, attend these summits?

To ask this question is also to ask what the G7 actually represents. If it is the club of the world's leading economic powers, not only Russia, but Canada and, arguably, Italy, the UK and France should be dropped, while China might soon have to be included. If it is made up of the world's leading democracies, India and Brazil would have a better claim to attend than Russia. Effectively, the G7 is a caucus of the like-minded and big countries of the rich North. That is itself a useful grouping.

### Clearest neglect

Inevitably, attention will be focused on issues that are currently at the top of the leaders' in-trays: Bosnia, Russia, and the embittered trade relations between the US and Japan. A "hijack" of the summit by Bosnia would be desirable if it produced a new measure of agreement among the interested powers. But it is difficult to believe this is on the cards. The question of Russia's future within the G7 arises here: is it going to be the problem, or part of the solution?

Failure to address the trade issue would represent the clearest neglect of the summiteers' immediate task. The defence of the liberal trading system was, arguably, the chief achievement of the first G7 summits, in the early 1970s. It continues to be a high priority for these major market economies.

Some fear that being tough on the US over its current policy towards Japan risks derailing the summit altogether. Yet Mr Clinton has to be told that US unilateralism imperils the rules-based multilateral system, to which his predecessors devoted so much effort and imagination. Who can make this point more effectively than this group of long-standing US allies?

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tion's traumatised financial markets are waiting nervously to see whether history repeats itself. The plunging stock market has reached a critical phase and the expectation is growing that the government will be forced into a return of the emergency measures it took in similar circumstances almost three years ago.

The market has now fallen perilously close to levels that in August 1992 sparked a full-blown crisis. In the past year the Nikkei index of 225 leading stocks has fallen 31 per cent. This week it closed below 15,000 for the first time since that critical month.

Investors have been heading for the exits in overwhelming numbers - the big Japanese institutions foremost among them. The life insurers, which bought stocks heavily in the 1980s, have subsequently discovered that the falling market has left them almost unable to meet their liabilities. They are dumping their risk-carrying assets; they sold more than ¥2,000bn (\$24bn) in the past month. Individual investors took most of their money out many months ago.

"Domestic sentiment is very depressed," says Mr Haruyoshi Mabuchi, senior strategist at the Nikko Research Centre, the research arm of Nikko Securities. "Large institutions will still need to liquidate stocks for some time yet."

Meanwhile, foreign investors, who played a key role in driving the market higher in the first half of last year, have now also turned their backs. For them the rise of the yen has offset much of the loss in the Nikkei in the past 12 months. Between the beginning of January and the first week of May equities fell 14.8 per cent, but in the same period the yen rose 16.5 per cent. However, in the past month, the yen has stabilised while stocks have fallen faster, pushing Japanese investment into negative returns for most foreigners.

In recent weeks the selling pressure has accelerated. Much of it is generally attributed to renewed fears about the health of the banking system. Falling stock prices blow large holes in banks' balance sheets, since they are permitted to count a proportion of their unrealised gains on equities as capital. The critical level varies for each bank, but if the Nikkei moves below 14,000 a growing number will see their capital levels dip below agreed international guidelines - with bruising implications for the economy. Here lies the strongest parallel with 1992. Then, the market's (and some would say the economy's) nemesis was averted, or at least postponed, by the authorities' action.

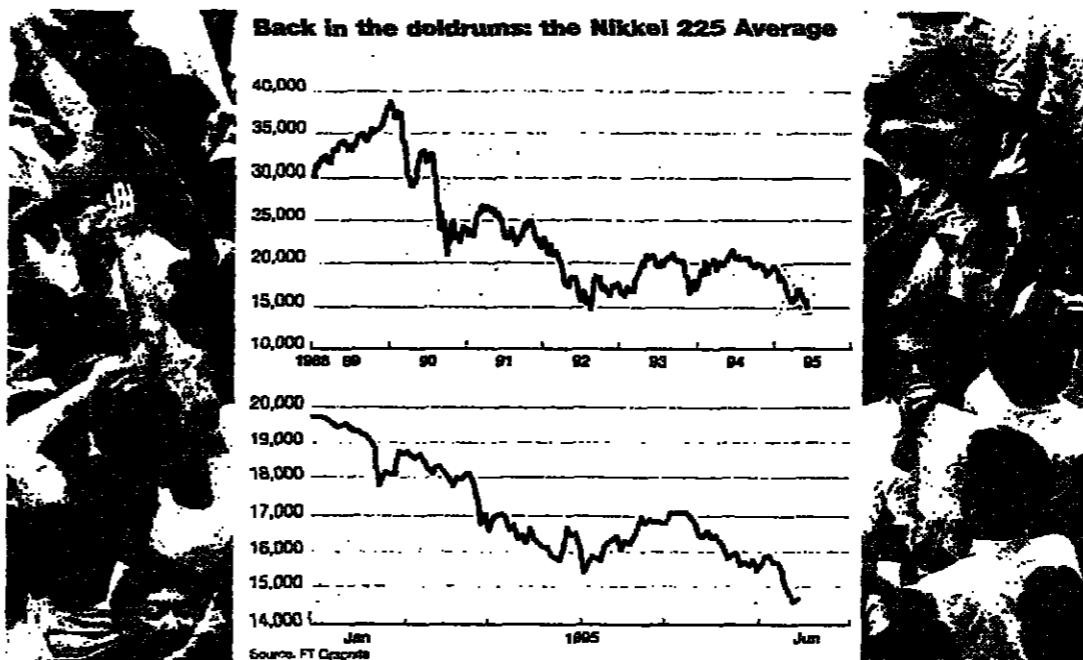
In 1992, as the index threatened to fall below the 14,000 level, the government moved quickly to shore up the system. It immediately began buying up stocks, through public institutions (the notorious Price Keeping Operation, or PKO) backed up by higher public spending. For good measure it announced some imaginative schemes to help banks with their massive portfolio of non-performing loans and shortly afterwards cut the discount rate to an all-time low. Within days the Nikkei had bounced. And after three months it had risen more than 15 per cent, providing vital flotation for the balance sheets of most of the country's banks.

But it was really only a respite, not a cure. Now prices are back where they were. And this time the condition of the financial system is, if anything, worse. Several smaller banks are believed to be on the point of collapse. Demand for lending is chronically weak and problem loans are still rising. Even in a relatively healthy financial climate the damage would be serious, but in Japan's present state the risk of prolonged debility in the banking system is high.

Yet so far the government has not

# Poor prognosis for Tokyo patient

Gerard Baker on the grim implications for Japanese banks and the economy of the fall in share prices



ridden decisively to the rescue. The discount rate was cut again in April to 1 per cent and various tax cuts and public spending increases have been tried. But none of them has been targeted at the banks specifically. Last week investors were further demoralised by the unveiling of a long-awaited package of rescue

banks have real problems - then the government will have to act."

But the authorities have much less room to manoeuvre this time. One important change from 1992 is popular opposition to the use of public funds to bail out the banking system. In April, the voters of Tokyo elected a governor, a former television comedian, at that, whose principal policy platform had been opposition to the city's contribution to a badly bungled bail-out of two small banks. The operation was led by the Bank of Japan and the finance ministry, and many ministry officials saw the vote as a portentous rebuff to their well-laid plans for an orderly reconstruction of the banking system.

The overall effect is an unprecedented squeeze on total nominal demand in the economy. For the first time since the 1920s, Japanese nominal gross domestic product in the present quarter is likely to register a decline - not good news for a stock market whose fortunes are tied to nominal, not real performance.

At the root of all this is demand deficiency. Japan is still locked in a chronic malaise of overcapacity from the period of surging asset prices in the late 1980s. Land prices are still falling, a factor which is transmitted to companies and individuals through smaller wealth and higher real levels of debt.

Until those excesses are eliminated, quick fixes can do little more than give the banking sector some breathing space. They are unlikely to restore confidence to the market, or produce any early sign of strength in what underpins it: the economy.

The death of the conglomerate has been much exaggerated, argues Tony Jackson

## Management matters

It had risen almost 50 per cent to a more respectable \$18.

The old rationale for conglomerates spoke of achieving balance by assembling businesses with different cyclical characteristics. Conglomerates could also take poorly run companies and subject them to professional management.

The counter-argument is that to compete in today's world, managers need focus. As for the capital markets, they are now sophisticated enough to fund companies through cyclical downturns, while the stock market puts a higher value on businesses which are separately identifiable.

There are several snags in this now familiar argument. Take ITT's case first. The company has been refining itself ever since Mr Araskog took over in 1979, and has shed several hundred subsidiaries - including its original telephone business - in the process. By last year, it had reached the point of separately identifying the three businesses into which it is now splitting itself, and

reported its results accordingly.

The hypothesis is thus that back in December the market was seriously undervaluing three clearly identified streams of income, simply because they were represented by one share instead of three. Academics may argue over how efficient the market is in establishing correct

measures that amounted to little more than a few vague exhortations and the repetition of some basic central banking mantras.

"The leading investors are locked in a deflationary spiral," says Mr Neil Rogers, strategist at UBS Securities in Tokyo. "Falling stock prices depress confidence, encouraging risk-averse investments such as yen bonds. That puts further pressure on stocks and so on. Sooner or later prices fall to a point where

with high-performing companies which are conglomerates in all but name. Take Johnson & Johnson, which makes anything from toothbrushes and baby oil to blood-testing machines and brain surgery equipment.

Or take General Electric, which makes aero engines and washing machines and owns a television network. Its financial performance and stock rating make it the most valuable company in the US.

There is no doubt that ITT became a machine for destroying value: its book value per share has fallen by almost a fifth in the past five years. This was not because it was a conglomerate, but because its management was not functioning properly. While Mr Araskog might not put it quite those terms, he touched on the point in talking to analysts on Tuesday.

By way of testing the water for buyers, he said, ITT had spun off its timber and pulp business and a minority stake in its educational services business. "I've had the chance to observe the reaction of

management at both those companies," he said. "While it might be difficult for the head of a conglomerate to admit it, it's clear that there is a distinctly new excitement."

Mr Araskog may be right to think that splitting the company will release the energies of management and improve their performance. That seems to have been the experience of several other companies which have taken the break-up route, such as Imperial Chemical Industries, the UK chemical giant.

That is the basis on which the stock market has pushed up ITT's shares. It will also be why, if Mr Araskog is right, the three new companies will secure capital on better terms.

In short, the argument about conglomerates is a red herring. At certain points, the management of certain companies becomes dysfunctional, and is better disbanded.

Other companies contrive to run highly disparate businesses with great success. Many are, in reality, conglomerates. The fact that they reject the label is in large part the legacy of ITT.

## Financial Times

### 100 years ago

Edison Swan Electric Light Co The Civil Lord of the Admiralty was asked in the House of Commons if the Edison Swan Electric Light Company were executing an Admiralty order for incandescent lamps. He was asked if he was aware that a strike began there a fortnight ago, of which the object was to compel the firm to recognise the standard rates of wages, and that one effect of this strike had been to bring out of work 300 women, in addition to about 80 men and boys concerned in the strike itself.

New coinage Vienna: The Neue Freie Presse has published a despatch from Budapest stating that the Hungarian Minister of Finance has left for Vienna in order to confer with Dr. Pfeifer, the Austrian Finance Minister, regarding the cost of the new coinage.

Standard Motor and Australia Mr H.H. Robinson, representative of the Standard Motor Company in Sydney, announced today that the Standard Motor Company of Coventry has completed plans to begin manufacturing cars with Richards Industries of Adelaide.

### I didn't mean it

Minoru Makihara, president of Mitsubishi Corporation, is upset. An advertisement by the American Automobile Manufacturers Association, which appeared in the Washington Post on Tuesday, called upon Japan to open its market to foreign cars, trucks and auto parts. The advertisement read: "Who says Japan must ease regulations and change business customs?" Those apparently in favour were named as President Bill Clinton, Senator Bob Dole, Speaker New Gingrich - and Minoru Makihara.

Unfortunately for Makihara, head of a company belonging to one of Japan's most prestigious *keiretsu*, the association had tracked down a quote from him in the *Asahi*, a leading Japanese daily newspaper, claiming that "Japan must ease business regulations and change business customs".

Makihara was misquoted, and that he will fully explain himself to foreign backs in Tokyo today.

Should be an interesting event - so long as the right questions are asked.

## OBSEVER

### Atomic balls at Halifax

plug themselves is a local seafood company, handing out samples of smoked salmon and mackerel to weary travellers waiting by the slow moving baggage carousel at Halifax airport.

But the prize for unexpected largesse must go to Atomic Energy of Canada, which has braved a summit with a strong environmentalist tinge to hand out something called "atomic golf balls". Treated with electrons, the balls are supposed to have added bounce. Let's hope some of their magic rubs off on the summit leaders.

Corporate sponsors to the rescue! McCain, a Canadian food group, expects to give away 27,000 packets of fruit juice and 30,000 sticky honey buns in the summit media centre by the time talks finish on Saturday. On the beverage front, Moosehead, a local brewery, will supply beer, as well as saving the organisers \$60,000 by lending a security fence to protect the world's leaders.

There are things in this speech with which one can disagree. Unhappily, investment is not leading this recovery, as yet. But Mr Clarke offers an intelligent Conservative vision, backed by more achievements than critics are prepared to recognise. In doing so, he offers a challenge to the opposition, to his colleagues and to the British people. It is unlikely to make him loved. But fate does not promise that to chancellors.

Among the more enterprising of the 60 companies donating money or services in return for a chance to

make it into the latest list. Of the remainder, George Soros is the best known casually. For the first time in four years Soros failed to top the list. But he still came in second, with \$70m.

And don't shed too many tears for

Salomon's top team. Five of the top 20 Wall Street earners came from Salomon, compared with one from Lazard Frères - and none from the likes of Morgan Stanley and Goldman Sachs.

### Ultimate sacrifice



**IN BRIEF**

**WR Grace to divest medical care unit**

W.R. Grace, the US chemical group, is to spin off its National Medical Care subsidiary tax-free to share-holders. The head of the business, Mr Constantine Hambros, had bid \$3.5bn for it and will remain as chairman. Grace said it had turned down an approach from Vira, a smaller Californian health-care company.

**KHD and chief executive go separate ways**  
Klockner-Humboldt-Deutz (KHD), the troubled German engine maker, has parted company with Mr Werner Kirchgässer, its chief executive. He is believed to have had disagreements with Mr Michael Endres, the Deutsche Bank director who chairs KHD's supervisory board. Page 16

**Portugal privatises tobacco company**  
The Portuguese government is to privatise Tabacalera, a tobacco company, by selling 80 per cent to a single buyer and the remainder to employees and small savers. Page 16

**Norwegian bank launches rival bid**  
Sparebank Nor, Norway's biggest savings bank, has launched a rival bid for Norgeskredit Holding, the emerging Norwegian financial services group. Page 16

**Belgacom rings up a record**  
Belgacom, Belgium's state-owned telephone group, announced record annual profits, just weeks before the government is expected to announce its choice of foreign partner for the company. Page 16

**US healthcare group issues warning**  
Humana, one of the biggest managed healthcare companies in the US, warned that its profits would not match expectations in the second quarter. Page 18

**Chinese agency sells Hong Kong stake**  
An investment agency of the Chinese government has sold 61m shares in Hongkong Telecom, raising some HK\$945.5m (\$122m). Page 19

**Indian investment bank shrugs off gloom**  
Although India's stock market is more than a third of its peak of September last year, the Industrial Development Bank of India, the country's leading financier of industrial projects, is not deterred from proceeding with a share issue. Page 19

**Graham agrees £52m Eritrh bid**  
Graham Group was yesterday poised to become the UK's second largest builders' merchant by agreeing to acquire Eritrh in a deal worth about £51.5m (\$51m). Page 20

**FKI rights seek £137m for expansion**  
FKI, the UK engineering group, has launched a £137.5m (\$164.5m) rights issue to cut borrowings and fund acquisitions. Page 20

**Electronics put Istanbul on upward track**  
The victory of Turkey's prime minister in local elections 10 days ago, appears to have re-established the Istanbul market on the upward track. Back Page

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Auto	840	Autosport	505
Korset	588.7	BPZ Local	405
Kestrel	480.5	BPZ	102
Stringer And	765	Brussels	783
Enteknica	765	Buccaneer Co	650
Zenith Fellow	195	Deutsche	810
NEW YORK (gas)	195	Forc (Jewellers)	941
Car Therapeutics	10%	FTC	10
Exos	585	Glycine	6300
Honeywell	40%	Heinkel Motor	494
Hush	15%	Sony	3240
Int'l Hush	51%	Telstar Motor	1823
Int'l Hush	40%	Tele	10
LONDON (pence)	105	Tele	1440
Masses	105	Sheldene	975
Kelvin Bennet	724	THOMSON (gas)	22
Pragfly TV	405	Tele	51
Police	217	China	358
Brit Thornton	30	Hong Kong	59.5
Tapete Tech	35	World War II	24.3
TOURISM (gas)	105	Shan Hua	58
Scotiabank	82	Shan Hua (gas)	15
Scotiabank	38	Shan Hua (gas)	22
Diamond Radio	874	Shan Hua	22
Leisure	574	Police	58
Magus A	54%	Tele	16
Pocon	63%	Amer Standard	250
	14	The President	222
	10		
New York & Toronto prices at 12.30.			

**Sprint may spin off cellular operations**

By Maggie Urry in New York

Regulations force US company to look at offloading business in wake of winning auctions for PCS wireless licenses

Sprint, the US communications company, is considering spinning off or selling its conventional cellular business following its success in auctions for personal communications spectrum wireless licenses in March.

Sprint Cellular is the eighth largest cellular company in the US with 1.2m customers. In the year to March 31, it had operating revenues of \$762m and operating income of \$104m, more than 200 per cent higher than in the previous year. The group has annual revenues of \$12.6bn.

Mr William Esrey, chairman and chief

executive, said the board was studying

"various options as we seek the most

effective marketing identity and technological infrastructure for our wireless business". He said the industry was forecast to triple or quadruple over the next decade.

In morning trading, Sprint shares rose

8% to \$34.4

in the March PCS auctions. Sprint

Telecommunications Venture, a joint

venture between Sprint and three cable

TV groups: Tele-Communications, Comcast and Cox. The companies, won licences taking its coverage to 182m in people. However, its success means it is in breach of Federal Communications Commission regulations which stop PCS licence winners from owning large stakes in cellular services in the same area. Sprint has overlaps in four cities: Dallas, Texas; Des Moines, Iowa; Detroit, Michigan and Philadelphia, Pennsylvania.

Under the FCC rules the winner of a PCS wireless licence cannot also own more than 20 per cent of a cellular provider serving more than 10 per cent of the population in the same area. Sprint is therefore required to reduce its stake in its cellular businesses in those four cities to under 20 per cent, or to cut the population it serves to under 10 per cent.

The minimum reduction would require a cut in its population of 1.7m,

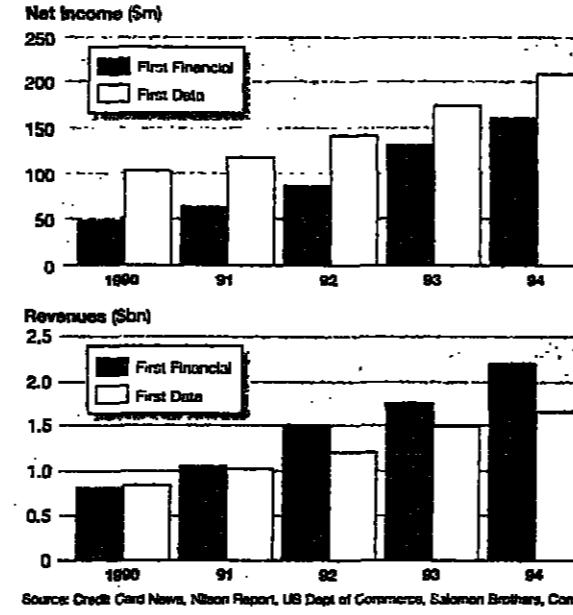
or if it sold out of these markets completely and made cuts in other overlap markets, it would reduce its population by 8m. However, Sprint is considering going further than the minimum required, and could either sell or exchange some of its cellular activities, or demerge the business by giving shares to shareholders.

Sprint has appointed Dillon Read and Salomon Brothers, two investment banks, to advise on the options. It would assess each option for strategic implications, tax considerations and the effect on shareholder value. It would make a decision in a few weeks.

**Richard Waters analyses the \$6.5bn information services takeover**

**First Data forges pivotal link in electric pay chain**

**What's on the cards**



in Australia. A second fast-growing area is money transmission. Through the acquisition last year of Western Union, which has 24,000 agents around the world, First Data is likely to turn more towards the industry that has been the engine of its growth: financial services.

Between them, the two companies boast an array of processing activities which, when combined, will create a company with an unmatched scale and breadth of product line. In a business where low unit costs are vital, that will make First Data one of the most powerful companies in the global consumer finance business, though its back-office role will make its presence invisible to most consumers.

It will control the flow of information between banks and other card issuers on the one hand and merchants on the other - a powerful position in the fast-expanding electronic payments business.

Credit and charge cards have been at the heart of both companies' growth.

In the US, First Data has

become the biggest processor of credit card transactions for banks, handling 3.8bn transactions last year, while First Financial is the biggest in the business of merchant processing - authorising and settling card transactions for retailers, hotels, restaurants and others.

Elsewhere, First Data has become the UK's biggest bank card processor and is the largest electronic funds transfer handler.

With its extensive transaction and customer information, it is also in a good position to help banks to analyse their own customers' behaviour or launch direct marketing campaigns.

Who, then, controls the customer relationship? According to Mr Duques, many banks do not want direct relationships with some retailers or airlines, and would rather deal through First Data.

Anyway, he adds, "the world is a huge place. It's a free country and people compete". But First Data, like First Financial, stressed its primary aim was to form alliances. "We don't own customers, we just provide services," says Mr Thomas.

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## INTERNATIONAL COMPANIES AND FINANCE

## Sparebanken Nor launches rival bid for Norgeskredit

By Karen Fossel  
in Oslo

Sparebanken Nor, Norway's biggest savings bank, yesterday launched a rival bid for Norgeskredit Holding, the emerging Norwegian financial services group.

The move, at the request of Norgeskredit, comes two days after a lower offer from Christiania Bank, Norway's second biggest bank.

Sparebanken Nor, known internationally as Union Bank of Norway, has offered NKR220 per preference share, valuing Norgeskredit - which has assets of NKR300m - at more than NKR2.5bn (\$400m).

On Monday, Christiania bid

NKR200 per preference share, equivalent to about NKR2.3bn.

Sparebanken Nor said it made the offer at the request of Norgeskredit, which has rejected Christiania's preliminary approaches on the grounds of price and its plans for the company.

Norgeskredit, whose main activity is mortgage lending, yesterday sent a letter to shareholders advising that the offer from Sparebanken Nor appeared to be better on "all main points", but said the board would evaluate both bids.

It advised shareholders to wait before deciding on the two offers until June 21 when details of the board's

assessment would be disclosed.

Norgeskredit closed NKR21 higher at NKR221 yesterday, while Christiania fell NKR0.10 to NKR13.10.

The contest between Sparebanken Nor and Christiania comes amid a separate takeover battle in the country's financial sector.

The ownership of Vital Forsikring, Norway's biggest life and pension group, is being fought between Aegon, the large Dutch insurance group, and Den norske Bank, Norway's biggest commercial bank.

Aegon last month bid NKR103 a share for Vital but DnB countered with a higher bid of NKR110.

## Belgacom posts record earnings

By Emma Tucker  
in Brussels

Belgacom, Belgium's state-owned telephone group, yesterday announced record profits for 1994, just weeks before the government is expected to announce its choice of foreign partner for the company.

Mr John Goossens, chief executive, said net profits were BFR9.7bn (\$338m) last year, up marginally on 1993's figures, and turnover had risen to BFR11.7bn from BFR10.9bn in 1993.

The figures were more important than usual because the Belgian government aims

to sell a 25 per cent stake in Belgacom - which has been valued by the government at BFR160bn - before the end of the year.

A shortlist of five leading contenders has been drawn up for what will amount to Europe's biggest, and western Europe's first, telecoms acquisition target.

The interested companies are British Telecommunications, in discussion with Bell Atlantic of the US; Koninklijke PTT Nederland; Ameritech of the US; and Stet, the Italian state telecoms company.

Investments by Belgacom, one of the biggest investors in

Belgium, amounted to BFR33bn in 1994, a drop on 1993 when the company acquired the Belgacom Towers building in Brussels.

Last year's investments were concentrated on the digitalisation of the network and other modernisations.

Pre-tax profits fell to BFR10bn from BFR12.2bn in 1993.

Mr Goossens said that in spite of mounting competition, he expected a rise in Belgacom's turnover this year but acknowledged the company would face a challenge once the telecoms sector was liberalised across the EU in 1998.

Mr Schneider, 43, said he would "concentrate especially on improving [the company's] operating performance through internal measures", according to a statement issued by KHD.

"The priority will be to

expand relations with clients, further improve manufacturing processes and cost structures and above all increase the motivation and creativity of the employees," Mr Schneider added.

Mr Kirchgässer's departure, by mutual agreement, comes just months after KHD was rescued from bankruptcy with an emergency package worth DM915m (\$656m), over half of which came from Deutsche Bank, the company's biggest shareholder. The company said in May it expected to lose DM305m this year and not break even until 1997.

The difficulties at one of Germany's best-known engine makers stem from the late 1980s, but the company's near collapse in January is believed to have sealed Mr Kirchgässer's fortunes.

Until this March, Mr Schneider had been responsible for the engineering and plant divisions at Bremer Vulkan.

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## VW issues warning on demand

By Michael Lindemann

Demand for Volkswagen's cars was likely to remain hesitant for the rest of this year and not pick up until 1996, Mr Ferdinand Piëch, the group's chief executive, warned yesterday.

Mr Piëch said the new model of the Polo was expected to be the driving force behind higher sales.

His comments were underscored by Mr Klaus Volkert, head of VW's workers' council, who said that in spite of earlier predictions of stronger

demand, the economic recovery in Europe and North America had not yet translated into higher unit sales.

"The short-lived bush fire

has been put out and all that is left is a battle for prices and market share of the sort that we have never seen before in Germany," Mr Volkert said.

He added that it was "absolutely necessary" to make new investments at the Wolfsburg plant in northern Germany and that production had to be made more flexible" to raise output.

As part of the effort to

increase production at Wolfsburg, VW's biggest plant, Mr Piëch said about 5,000 extra workers would produce an extra 600 cars per day during the plant's holidays.

• Volkswagen Bratislava said its 1994 sales reached DM200m (\$142m) and that it expected more to come.

Its 1992 to 1994 investment totalled DM130m.

Mr Schneider said that in spite of mounting competition, he expected a rise in Belgacom's turnover this year but acknowledged the company would face a challenge once the telecoms sector was liberalised across the EU in 1998.

The VW offshoot said it planned to begin production of 30,000 cars a year in 1996.

VW is planning 1995 investment in the unit of DM36m.

Its 1992 to 1994 investment totalled DM130m.

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## INTERNATIONAL COMPANIES AND FINANCE

## Rautaruukki ahead 70% in first term and is upbeat

By Christopher Brown-Humes  
in Stockholm

Rautaruukki of Finland, the Nordic region's second largest steel producer, painted a bright picture of its prospects yesterday after reporting a 70 per cent jump in four-month profit to FM370m (386m).

It said strong west European steel markets and higher prices would ensure a "considerable" improvement in its full-year result after last year's FM40m profit. Turnover would rise to FM8.4bn from FM8.3bn.

Last week the group announced a FM1.5bn investment programme expected to increase steel output to 2.8m tonnes a year from 2.3m tonnes

over five years without damaging the balance sheet.

The figures, which are much better than expected, follow profits of FM217m in the first four months of 1994.

Rautaruukki said economic recovery had boosted investment and increased steel demand while west European prices were 10 per cent to 15 per cent higher than a year ago. However, the strong markka meant average Finnish currency prices were only 6 per cent higher.

Turnover rose to FM2.9bn from FM2.6bn in the four months, with higher volumes and firmer prices accounting equally for the 12 per cent increase.

## Renault in co-operation deal with German gearbox maker

By Helg Simonian,  
Motor Industry Correspondent

Renault VI, the trucks and buses division of the French motor group, has signed a letter of intent to co-operate on medium duty gearboxes with ZF, the German gearbox specialist.

Renault will buy models from ZF's nine and 16-speed Econid transmission range, while the German company will purchase gears and shafts from Renault VI.

The deal has been struck because demand for such products, which are designed for trucks in the 25 to 35 tonne range, is relatively limited and

manufacturers are keen to seek economies of scale.

Moreover, ZF's gearboxes offer some technical benefits and are lighter than their Renault equivalents, which are better suited to heavier vehicles.

Renault VI gave no indication of the number of units involved, or the value of the deal. However, it said the two manufacturers hoped to reach final decisions on the extent of their co-operation soon.

The agreement comes hard on the heels of a memorandum of understanding this month between Renault VI and MAN of Germany to study the development and manufacture of components.

A number of leading truck makers have been trying to establish co-operation deals to reduce development expenditure and split production costs.

Renault VI was particularly active in this respect after merger plans with Volvo of Sweden fell through at the end of 1993.

The company already has an arrangement with Iveco, owned by Italy's Fiat, to work together on truck cabs, and is now undertaking a number of studies to find ways of co-operating more closely with Mack's US subsidiary, on big truck engines.

## IBM and Europay collaborate

By Richard Wolfe

International Business Machines yesterday linked with Europay, the international payment card organisation, to develop a fraud-free shopping service over the Internet.

The joint initiative aims to design a secure payment system based on smart cards - plastic cards which carry a computer chip. Shoppers would be able to use Europay cards to purchase goods and services over the international electronic network using a card reader attached to a personal computer, telephone or television.

Mr Ron Williams, chief executive of Europay, said: "We plan to unleash huge demand for electronic commerce that

capitalises on the revolutionary potential of digital technology.

"There is the potential to attract tens of millions of consumers and process billions of transactions by linking the highest standards of payment security and fraud protection offered by chip cards with Europay brands and IBM's open payment protocol."

The smart card approach is an attempt to solve the problem of smaller payments over the Internet, which are costly to process. Europay's system, which is expected to be piloted early next year, is designed to be used with its "electronic purse" - a card which stores cash value.

However, shoppers will also be able to use Europay's debit card as software packages are designed to encrypt card details before transmission over the Internet.

## Data storage supplier diversifies

By Louise Kehoe  
in San Francisco

EMC, the leading supplier of data storage systems used with mainframe computers, has entered the "open systems" market and formed marketing alliances with three of the top database software companies.

Building on its success with mainframes - EMC has stolen IBM's market leadership in data storage systems - the company aims to move into systems for use with comput-

ers running the Unix operating system, such as those supplied by Hewlett-Packard, Digital Equipment and Sun Microsystems.

EMC pioneered the use of Redundant Array of Inexpensive Disks (Raid) technology, in which a large number of standard disk drives, much like those used in personal computers, are linked to create a large capacity data storage system.

Raid systems are rapidly displacing traditional data storage systems from suppliers such as IBM and Hitachi. EMC will this year achieve a 38 per cent share of the world market for data storage systems, measured in gigabytes of storage capacity, according to IDC, the market research group.

IBM will sit behind EMC to 35 per cent, down from a 75 per cent share in 1990, market analysts say. However, IBM and other traditional data storage systems builders have responded with their own versions of Raid systems.

systems from suppliers such as

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## Rebels win the day at Suez annual meeting

By Andrew Jack in Paris

The Maison de la Chimie in central Paris was an appropriate location yesterday for an unusually explosive annual meeting of Suez, the flagship French industrial and financial holding company.

The hall that served in late April as the location for the surprise first-round victory celebrations of Mr Lionel Jospin, the French socialist party presidential candidate, was equally appropriate for the outspoken rebellions by leading shareholder groups.

It was Mr Jacques Friedmann, chairman of Union des Assurances de Paris, the French insurer which is Suez's largest shareholder at 6.9 per cent, who was the first to rise when Mr Gérard Worms, Suez chairman, opened the meeting to the floor.

Mr Friedmann, who had given an outspoken interview in the Tribune business newspaper on Tuesday, showed no signs of relenting even in front of such a public - and not entirely friendly - gathering.

He expressed his "disapproval" that the management of Suez had been holding discussions about an investment in Pinault Printemps Redoute, the French retail giant, without raising the matter with the board, on which he sits. He was swiftly followed by Mr Philippe Jaffré, chairman of Elf Aquitaine, which holds 5.6 per cent of Suez's shares, who said the group was lacking a clear strategy. Mr Jean-Louis Beffa, chairman of Saint Gobain, which controls 5.8 per cent, quickly followed.

Signs that trouble was brewing were evident from the start. The hundreds of shareholders gathered in the main hall, its balcony, an overflow room and the corridors outside, jeered when told the board was still meeting, 20 minutes after the assembly was due to begin.

Mr Worms offered his "infinite pardons" for the delay. But the extra time had clearly not been spent enjoying a lengthy lunch.

The three leading and maverick shareholders called for an amendment to one of the Suez resolutions, without which they would vote again against Mr Worms, quickly endorsed the change in spite of considerable blocking from other shareholders.

The amendment to resolution 10 proposed by Mr Friedmann limited the management's discretion to issue new shares which could be used for a public exchange of shares - something which might be used for an investment or cross-shareholding in Pinault Printemps Redoute.

While Mr Friedmann argues that a link with Pinault is not a logical strategic development for Suez, others see his move as an attempt to push his own alternative plan for a large financial conglomerate involving UAP, Suez and Banque Nationale de Paris, which holds a 5 per cent stake in Suez.

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But with a vote of 83 per cent in favour of his amended resolution, he won yesterday's battle.

Cor shares fell 88c in early trading in New York to \$10.20.

## Humana issues profits warning

By Richard Waters  
in New York

Humana, one of the biggest managed healthcare companies in the US, warned that its profits would not match market expectations in the second quarter, setting off the second stock-market rout in the sector in less than two months.

HMO groups have made substantial inroads into the business of traditional health insurers by providing health care coverage for a lower fixed cost and then signing up chains of hospitals and doctors to provide care more cheaply.

With rapid increases in membership and falling medical costs, profit growth in the sector has been rapid.

Now, though, the bigger and more established managed care companies, Humana and United Healthcare, are under pressure over allegations

care services have risen, in part because members signed up in previous years are beginning to make greater use of medical services.

Yesterday, Humana said it expected to earn between 23 cents and 31 cents a share in the three months to the end of June.

Though higher than the 23 cents of a year ago, this prediction is still below the 33 cents a share expected by analysts, the company said. Humana blamed the shortfall on higher medical costs, caused by its members increased use of medical services.

Like a number of other managed care companies, Humana has come under scrutiny in recent months over allegations

that it has resisted paying the medical bills of some members in an attempt to hold down medical spending.

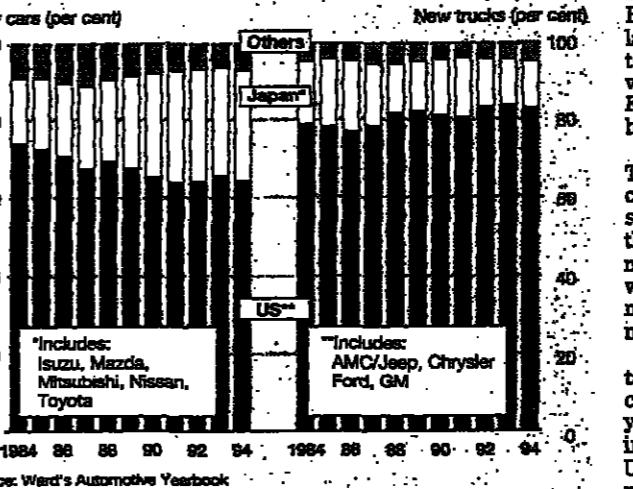
The company's warning yesterday echoed other recent signs of higher medical costs incurred by the industry. US Healthcare, for instance, pointed to a greater use of medical specialists as a major reason for a slowdown in its earnings growth to 5 per cent in the first three months of this year.

Humana's shares tumbled 14 per cent, to \$15.40, yesterday morning. Others to be affected by the news included United Healthcare and US Healthcare, both of which were down 5 per cent. See world stock markets

## Ford finds a stretch of open road

The rising yen and a return to large vehicles does not mean Japan can be written off, says Richard Waters

### US market share



reflect the most recent two-year depreciation of the dollar. While absorbing the pain, meanwhile, the Japanese makers have already shifted a larger share of their production to the US to put their costs on a more equal footing.

At the start of the decade, only three out of every 10 Japanese cars sold in the US were made in the so-called "transplant" factories there. By last year, that had risen to five out of 10. With no end in sight to the dollar's slide, that figure is set to go much higher.

Even without fierce competition from the Japanese, Ford-like other US manufacturers has found some parts of the US new vehicle market much tougher this year. Sales of light trucks (mini-vans, pick-up trucks and sport-utility vehicles) may continue to rise - but car sales, which make up about 60 per cent of the total market, have been falling in recent months. Price increases

are looking less likely as a result, while the level of incentives needed to shift vehicles has been rising steadily.

Consumers are "just not buying cars", says one salesman at Bredenbeck Ford in Glenview. Like other Ford dealerships, Bredenbeck is finding it particularly tough to shift the Contour/Mystique, the much-vaunted "world car" that cost Ford \$60m to develop. have been lacklustre.

With a new model of the Taurus, Ford's biggest-selling car, due to be launched this summer, there was talk early this year of raising prices by as much as 7 per cent. But the weakening car market has made such an increase look more and more unlikely.

Meanwhile, Ford is trying to take the competitive advantage conferred on it by the stronger yen into overseas markets - including Japan itself. The US's second-biggest automaker more than doubled its sales in Japan last year - though at 15,000 vehicles, and with only a handful of dealerships, its presence in the world's second-biggest auto market remains tiny.

"It's important to compete where some of your strong competitors are, and not let them have the market to themselves," says Mr McCammon. Ford 2000, the name given to a recently launched corporate reorganisation, is all about competing globally", he says.

Ford refuses to reveal its projections for the dollar/yen exchange rate. However, Mr McCammon says: "I think over time the yen will continue to strengthen just as it has done."

Ford's "huge trade surplus" will continue to propel the currency, he adds.

With a continuing rise in the yen, could Japanese car makers hope to compete as aggressively again? "It may take them a few years, but we are assuming they will achieve that goal," says Mr McCammon.

## Heart drug setback for Cor Therapeutics

By Daniel Green

Cor Therapeutics, one of the US biotechnology companies tipped to make a breakthrough this year, suffered a setback yesterday when it revealed that its heart drug had failed to show statistically significant effectiveness in clinical trials.

Cor shares fell 88c in early trading in New York to \$10.20.

The drug, Integrilin, was intended for use with patients undergoing coronary angioplasty, in which a balloon is used to widen a blocked blood vessel.

Angioplasty is safer and cheaper than open heart surgery but its beneficial effects are more short-lived, a problem which Integrilin was intended to cure.

California-based Cor held out some hope of further progress with the drug, saying the trial data was complex and "the implications of the trial in terms of regulatory approval cannot be readily determined".

## INTERNATIONAL COMPANIES AND FINANCE

## NEWS DIGEST

**Storli's profits undermined by exchange rate**

Norway's Storli, one of the world's largest chemical tanker operators, more than doubled four-month operating profits, to Nkr127.4m (\$20.4m) from Nkr60.7m a year ago. It benefited from a 25 per cent rise in time-charter freight rates, writes Karen Fossli in Oslo.

Freight income on a time-charter basis rose to Nkr688.50m from Nkr570.02m last year, but pre-tax profits slipped to Nkr45.74m from Nkr66.7m.

Pre-tax profits were undermined by an average kroner/dollar exchange rate in the period of Nkr6.45, some 13 per cent below last year's rate.

Meanwhile, Wilhelm Wilhelmsen, a large Norwegian shipping group, plunged into a four-month pre-tax loss of Nkr36m from a profit of Nkr321m. Last year's result included a Nkr10m extraordinary gain from the disposal of the group's shareholding in a drilling rig.

Operating profits were cut to Nkr7.2m from Nkr9.6m as currency losses reached Nkr1.1m against gains of Nkr7.1m last year. Financial charges against account rose to Nkr3m from Nkr2m.

Wilhelmsen warned that developments in the tanker and currency markets created uncertainty over results for the remainder of the year.

**Canadian Distillers wins right to advertise on TV**

Canadian Distillers has won the right to advertise on television after a five-year court battle, writes Robert Gibbons in Montreal.

The federal court in Ottawa overruled a section of the Television Broadcasting Regulations prohibiting spirits advertising, saying it violated the distiller's freedom of expression under the Charter of Rights.

Governments and regulatory bodies must recognise that spirits should be treated in the same way as beer and wine, which can be advertised on TV, said Mr Richard Fitzgerald, president of United Distillers and chairman of the Association of Canadian Distillers.

The distillers say they will now concentrate on the issue of unfair taxation. They blame high taxes for the "black market" that accounts for almost half the spirits consumed in eastern Canada.

**Imetal plans heavy investment programme**

This year should prove a record one for industrial investments, Mr René Miettis, chairman of Imetal, the French building and industrial minerals group, told the annual shareholders' meeting yesterday. Reuter reports from Paris.

"Industrial investments should rise sharply, to FF750m-FF850m (\$121.4m-\$131.5m) in 1995 from FF744m in 1994," he said. He added that the main developments would involve construction materials, kaolin, structural tubings and bimetallic products sectors.

He also disclosed that Imetal was reviewing "several external growth opportunities", and that construction materials was as a sector

where the group was seeking investment opportunities abroad.

Mr Miettis disclosed that consolidated turnover in the first five months of 1995 grew 8 per cent compared with the same period in 1994. On a comparable basis, and using constant exchange rates, turnover climbed 11 per cent.

Earnings from the construction materials business were expected to improve further this year as a result of higher sales volume and a recovery in the loss-making tiles and slates units.

Miettis predicted that the tiles business would break even this year, while slates would start improving by the end of 1995. Slates, however, would still incur a loss of FF12m in 1995, unchanged from the previous year.

Operating profit at the construction materials division rose 27 per cent to FF12.4m in 1994, while turnover grew 13 per cent to FF29.5m in 1994.

The performance of the industrial minerals sector should be "very satisfactory" in 1995, benefiting from higher sales volume and prices. He warned, however, that a weak dollar may hurt US sales denominated in francs.

The sector saw a 13 per cent rise in operating profit, to FF29.5m, and a 9 per cent increase in turnover to FF71.85m.

**Boral to pay A\$40m for US brick maker**

Boral, the Australian building materials and energy group, is buying Isenbom Brick & Tile, a North Carolina brick manufacturer, for around A\$40m (US\$28.5m), writes Nikki Tait.

The US company, described as one of the largest brick companies in the state, has two plants and a total production capacity of about 14m bricks. Annual sales are around US\$23m.

Boral, which currently has no manufacturing operations in North Carolina, will issue approximately 12m shares to the vendors in consideration.

**Australian state bank ready for possible float**

The Bank of Western Australia - better known now as BankWest - said yesterday it was appointing County NatWest, Hartley Poynton and Porter Western as joint lead managers for its possible stock market flotation.

The last two are Perth-based stockbroking firms.

The Western Australian government has yet to decide on whether to privatise BankWest via a stock market float, or through a trade sale. However, the bank said yesterday the lead managers' appointment meant that float preparation could move "to an advanced stage, so that the government can make an informed choice about the merit of a float relative to a sale by tender".

The potential proceeds from the BankWest sale have been estimated at around A\$750m-plus.

**Cement group upbeat**

Associated Cement Companies, India's largest cement maker, said production in the first two months of fiscal 1995-96 was up 20 per cent on the year ago period. Reuter reports from Bombay. At yesterday's annual meeting, the company reported a net profit of Rs1.4bn (\$45.9m) for fiscal 1994-95.

Mr Henry Fan, managing director of Citic Pacific, said Citic HK felt the time was right to cash in its shares, which were sold at an average price of HK\$15.50 each.

"It's not that we don't have confidence in the future of Hong Kong utility. It was made through Citic Hong Kong, a wholly-owned subsidiary of China International Trust and Investment Corporation of Beijing.

Citic Pacific, the Hong Kong-listed arm which is 43 per cent owned by Citic HK, retains its 12 per cent holding in Hong Kong Telecom.

Hong Kong Telecom is the colony's monopoly telecoms provider. Cable & Wireless of the UK has a majority stake.

In January 1993, when Citic Hong Kong sold 12 per cent of

Hong Kong Telecom to Citic Pacific, the stock was sold at HK\$7.80 a share, where it stood to make a profit of HK\$4.2m.

Calculations on the profit cleared by Citic HK this time are confused by the issue of a covered warrant, which formed part of the group's original financing of the Hong Kong Telecom stake in 1990.

Part of the tranche of shares was bought at HK\$4.47, and the balance was the result of exercising a cash option on the covered warrants.

Shares accumulated as a result of handing out cash instead of shares came at a higher price.

Analysis echoed Mr Fan, saying the sale was in line with Citic Hong Kong policy and did not reflect badly on Hong Kong Telecom, which lost its monopoly on domestic fixed-line services at the end of this month.

Hong Kong Telecom's shares yesterday rose 45 cents to HK\$15.55.

**Coca-Cola arm seeks A\$670m**

By Nikki Tait

Shares in Coca-Cola Amatil, the Sydney-based soft drinks group which is controlled by Coca-Cola in the US but listed separately on the Australian stock exchange, rose 12 cents to A\$7.87 yesterday, after the announcement of a A\$670m (US\$482m) one-for-four rights issue designed to fund expansion. The issue, announced on Tuesday, is pitched at A\$7.00 a share.

The cash call was rumoured a week ago and prompted a sharp fall in CCA shares which had previously stood above A\$8.20. In the event, the cash call is lower than the market expectation of A\$7.50m.

The funds will be used in part to buy - for US\$131.4m - the bottling operations in Romania which are held by the parent Coca-Cola company's wholly-owned subsidiary. The Coca-Cola Export Corporation, CCA has also agreed to buy-out the 51 per cent it does not already own of an Indonesian unit.

**Citic HK sells part of stake in colony's telecoms group**

By Louise Lucas in Hong Kong

The Chinese government's main domestic and international investment agency yesterday sold 51m shares in Hong Kong Telecom, raising some HK\$345.5m (US\$122.3m).

The funds will be channelled into oil exploration and other infrastructure projects on the mainland.

The sale, believed to involve a single buyer, represented a 0.5 per cent stake in the Hong Kong utility. It was made through Citic Hong Kong, a wholly-owned subsidiary of China International Trust and Investment Corporation of Beijing.

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**Mitsubishi Bank unveils loan fall**

By Emiko Terazono in Tokyo

Mitsubishi Bank yesterday revealed that its restructured loans, or loans whose interest rates have been cut due to the borrowers' financial problems, declined during the year to March.

Mitsubishi is the only Japanese bank to release annual earnings figures under US disclosure rules, because of its listing on the New York Stock Exchange. It said yesterday its consolidated restructured loans, a figure which all Japanese banks will be required to start reporting next year, fell 7.7 per cent from the previous year, to Yen45.4bn (US\$5.9bn). The bank also said its group non-

performing loans at the end of March rose 2 per cent to Yen27.3bn.

Mitsubishi, which in March announced plans to merge with Bank of Tokyo to create the world's biggest bank, announced its parent earnings results based on Japanese accounting rules last month. These indicated that bad-loan figures had declined 5.2 per cent to Yen26.4bn.

While the level of Mitsubishi's problem and restructured loans are regarded as relatively small compared with the country's other leading commercial banks, its earnings figures under US accounting guidelines are seen as a better indication of the health of the

Japanese banking industry, as Japanese disclosure rules are less strict.

The report under US rules showed that the bank's domestic non-performing loans rose 7.7 per cent to Yen45.4bn, while overseas bad loans fell 3.7 per cent to Yen2.4bn.

Group pre-tax profits for the year to March fell 23 per cent to Yen5.8bn, on a 4.5 per cent decline in operating revenue to Yen190.2bn. Net profits fell 7.7 per cent to Yen3.5bn. Net unrealised gains on investment securities totalled Yen1.3bn, compared with the Yen18.9bn posted by the parent.

For the full year to next March, the bank expects consolidated pre-tax profits to fall 28.7 per cent to Yen5bn, on a 0.7 per cent rise in operating revenue to Yen2.87.1bn.

The Bank of Japan, meanwhile, yesterday released its survey of restructured loans for the overall industry. At the end of March, restructured loans of 150 banks totalled Yen816.7bn, up 12.3 per cent from a year before. The release follows recent estimates by the Ministry of Finance that restructured loans extended by the country's leading 21 banks totalled more than Yen10,000bn at the end of March.

**Normandy and French group agree fresh deal**

By Nikki Tait in Sydney

Normandy, the Australian mining company headed by Mr Robert Champion de Crespigny, said yesterday it had modified its complex A\$450m (US\$323.7m) deal with France's state-owned Bureau de Recherches Géologiques et Minéries. The new deal allows BRGM to retain a 51 per cent interest in the Yanacocha and Cedimil projects in Peru.

These have been the subject of litigation, with BRGM's Peruvian joint venture partners - among them Newmont Mining Corporation in the US and Compania de Minas Buenaventura - claiming that the Normandy deal meant that pre-emptive rights conditions were being triggered.

Under the restructured deal, Normandy said BRGM would retain a 51 per cent interest in the Peruvian assets. As previously proposed, the balance of the assets involved in the deal would go into a new company - LaSource Compagnie Minière - which would be 60 per cent-owned by Normandy and 40 per cent by BRGM.

The deal will now be completed in two stages: Normandy will first take a 49 per cent interest in LaSource (LaSource's direct interest in the Peruvian assets will then be reduced to 49 per cent; and then Normandy will lift its interest to 60 per cent.

"Both the BRGM group and the Normandy group are very confident, based on the advice of their respective Peruvian lawyers, that once the courts have had the benefit of a full explanation of the LaSource transaction, they will decide that no breach of the pre-emptive rights provisions has occurred, or will occur," said the Australian company in a report to shareholders. Normandy recently changed its name from Normandy Poseidon.

• Niugini Mining (NML) said yesterday it had completed the purchase of an additional 16 per cent interest in the Lihir gold project in Papua New Guinea from RTZ's Kennecott Explorations.

The consideration, negotiated two years ago, was US\$48m. In addition, NML paid US\$8.1m as back payment of capital costs associated with the expanded interest.

**IDBI undaunted by market frailty**

India's stock markets might have been in better health to welcome the country's record public share issue, the Rs1.8bn (\$89.4m) offer from the Industrial Development Bank of India. The market is more than a third off its peak of September last year, gasping for liquidity, overhanging by a glut of new primary issues, beset by a wave of institutional selling and apparently bereft of all but fitful buying support.

None of this, however, has deterred IDBI, the country's leading financier of industrial projects, from proceeding with the offer, which opens for seven days on July 5. "Is the timing right? Well, we need the funds," says Mr S. H. Khan, IDBI's chairman and managing director. "I'm not sure how long these market conditions will last - but from all indications the market is not going to improve quickly."

IDBI needs the funds because the government's economic reforms of 1991 have gradually eroded the concessionary state support which it has enjoyed since its foundation in 1964.

State-owned institutions must now, wherever possible, stand on their own financial feet. And, for the past three years, the bank has largely managed, meeting 60 per cent of last year's funding requirements from internal accruals and the remainder from local and foreign borrowings.

But, with an eye on playing a central role in financing India's giant infrastructural needs, notably in the power sector, Mr Khan said the bank had no choice but to tap the equity markets.

In 1994, it sanctioned project finance assistance worth Rs67bn, comprising rupee loans of Rs32bn, foreign currency loans of Rs10bn, under-

writing worth Rs7bn, direct subscription of Rs16bn and deferred payment guarantees of Rs14bn. Sectors to benefit included chemicals, textiles, power, road transport, iron and steel, and services. Direct industrial lending last year made up 81 per cent of IDBI's total investment approvals.

The bank's second core activity, which also follows from its

Rs73bn, Mr Khan says he expects IDBI's first commercial bank, to serve the institution's existing corporate clients, to begin operations later this year. Foreign exchange services are set to expand, with IDBI's foreign currency dealing room now into its second year. The bank is developing its industrial rehabilitation unit, primarily as an agency for all public sector industries.

Mr Khan says the bank is also awaiting approval from the Indian government and those of the US and Singapore to establish its first overseas representative offices.

The premium issue price of IDBI's shares - at Rs130 against present book value of Rs75 - reflects IDBI and its lead managers' belief that the market will show faith in the institution's ability to adapt.

Analysts note that the bank is losing the boost to its lending margins from long-term concessional government support. They also point out that its funding costs will benefit for the next three or four years from a favourable mismatch of maturities. While IDBI's past borrowings have typically been at a maturity of 15 or more years, its present average lending period is eight to 10 years.

The bank's results, due later this week, are expected to show a 26 per cent rise in after-tax profits to Rs7.7bn against Rs6.1bn for 1993-94.

On such expectations, and given IDBI's strong balance sheet, past profits, size and market position, S. G. Warburg recently reckoned Rs120 to be an "extremely attractive valuation". Come July, IDBI will be hoping India's weary, sated stock market agrees.

The consideration, negotiated two years ago, was US\$48m. In addition, NML paid US\$8.1m as back payment of capital costs associated with the expanded interest.

1995

This announcement appears as a matter of record only.

**Kingdom of Sweden**

(Represented by the Swedish National Debt Office)

**U.S.\$6,000,000,000 Multicurrency Revolving Credit Facility**

Arrangers:

Citibank International plc

J.P. Morgan Securities Ltd.

Underwriting Lead Managers:

ABN AMRO Bank N.V., Stockholm Branch

## COMPANY NEWS: UK

## Hardware and material handling behind 29% underlying advance

# FKI seeks £137m for expansion

By Tim Burt

FKI, the fast-growing UK engineering group, has pledged to accelerate its expansion strategy by launching a £136.6m (£214.5m) rights issue to cut borrowings and fund acquisitions.

The company, which has acquired 15 companies in three years, said the proceeds would reduce net borrowings from £156m to about £20m, cutting gearing from more than 70 per cent to 5 per cent.

Mr Jeff Whalley, chairman, said FKI wanted to relieve pressure on its balance sheet following its £84.4m acquisition earlier this year of Andura, the US lifting equipment manufacturer. "We were becoming boxed in with the high level of gearing and were finding it uncomfortable."

FKI is issuing 11.2m shares on a 1-for-4 basis at 125p, a 15.5 per cent discount to yesterday's closing price. Once the rights issue has been completed, Mr Whalley hinted FKI would move to make further acquisitions. The group is considering four companies and has not ruled out a hostile bid.

Some analysts predicted FKI would opt for a bolt-on acquisition to augment its presence in material handling - mainly heavy lifting equipment, hoists and chains - and hardware, dominated by casters, hinges and door furniture.

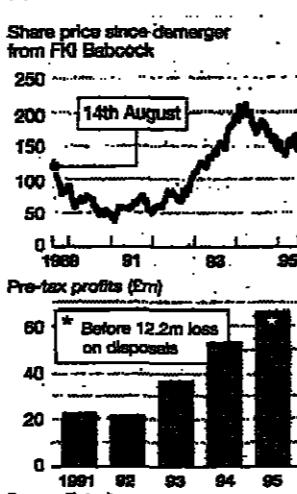
Rapid growth in FKI's hardware and material handling divisions fuelled a 29 per cent increase in underlying profits to £67.6m in the year to March 31. Operating profits rose by a similar margin from £60.4m to £78m, of which £21.7m was generated in North America. The heavy reliance on overseas profits forced the group to write off £2m of advance corporation tax.

The figures, however, were dented by a £12.2m loss on the disposal of three subsidiaries to Wellman, the engineering group. That pegged headline pre-tax profits at £55.4m for the year to March 31.

The figure was also dented by £4.2m of restructuring charges. Mr Bob Beeston, chief executive, said: "There will be a similar charge this year and we will continue to drive down headcount."

Mr Jeff Whalley, chairman, said the group had also been handicapped by a disappointing year at its UK engineering arm, where profits fell from

FIG



## Further provision puts NFC into loss

By Geoff Dyer

NFC, the transport and logistics group, is taking a further £35m (£55m) restructuring provision leaving it with a small interim pre-tax loss.

The provision is on top of the £50m set aside for restructuring over the last two years and NFC said there would be job losses across the group.

Mr Gerry Murphy, chief executive, said: "Few companies have been more analysed than NFC. There will be no more navel-gazing. It is now time to get on and act."

Although he has officially been in the job for only nine days, he said that he had approved all the restructuring decisions.

The second interim dividend was maintained at 1.5p, although this was covered only 1.2 times by pre-exceptional earnings. Sir Christopher Bland, who took over as chairman in December, said that over the next 2-3 years dividend cover would be increased to two times.

New provisions worth £57m were outlined yesterday, described by Sir Christopher as "the last bite of the cherry", however £22m of unspent provisions from last year were carried forward.

Mr Murphy said: "The proposed actions include rationalising the property portfolio, cost-reduction and writing off non-performing assets. Mr Murphy described them as 'remedial' measures, and said they were not paving the way for the group to exit from certain businesses.

Pre-tax profits last time of £50.7m became losses of £20,000 after the provision.

Losses at the European logistics division increased to £4.6m (£1m), reflecting last year's acquisitions in Germany. Mr Murphy said that provision had been made for leaving some loss-making contracts in Germany and Spain and a new senior management team had been appointed.

The moving services division recorded a £2m loss, against profits of £1.4m, due to bad debts and increased operating costs in North America.

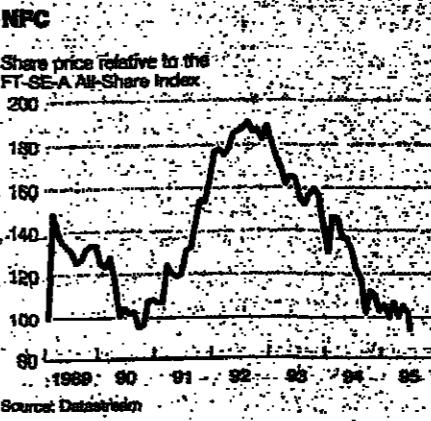
## LEX COMMENT

## NFC

For a chairman and chief executive announcing yet another disappointing set of results, NFC's Sir Christopher Bland and Mr Gerry Murphy are in a relatively comfortable position. Both are new to their jobs and can present the company's slide into loss, after exceptional, as a final legacy of the previous management. Their justification for maintaining an uncovered dividend is fair enough. They believe profits will be sufficient to cover dividends twice over within three years. This would require 1995 profits of at least £15m, which appears feasible.

NFC's revenues are still rising, but margins have been squeezed, as lucrative logistics contracts signed in the 1980s have come up for renegotiation. The company believes margins are now stabilising, as the bulge of renewals passes. Still, there is little chance of any price recovery, so the strategy for restoring margins is to slash the cost base. Heavy provisions against restructuring give plenty of scope for getting rid of surplus property and staff. The new managers will not balk at wielding the knife, but the skill lies in not impinging on the company's revenue growth.

The company has disappointed often before. Having admitted last year's German acquisitions were a mistake, it remains to be seen whether they can be straightened out. Pressure on margins could persist, and some businesses may be vulnerable to economic slowdown. The new management may be taking the right actions, but recovery is far from assured.



## Tax boost for Ocean Wilsons

Ocean Wilsons (Holdings), the investment holding company and shipping services and port activities group, saw pre-tax profits surge from £5.88m to £10.48m.

The after-tax balance was £8.69m (£4.16m) of which £6.33m (£3.43m) was attributable to Brazilian operations.

The company said the increase was due partly to the currency mismatch between the Brazilian local currency and the US dollar and non-recurring items, including the release of part of the deferred tax in Brazil cutting net tax by more than £3m.

A monetary correction this time added £977,000 (took £354,000), while exchange credits on remittances came to £53,000 (£498,000). There was also a net surplus on disposal of subsidiaries of £1.63m (nil).

Net assets per share came to 138.54p (97.51p), of which 96.85p (58.37p) was in Brazil.

## TLG holders cut stakes in placing

By Motoko Rich

The two largest investors in TLG, the industrial lighting equipment manufacturer that floated in November, have sold 5.7m shares at 150p a share.

Shares in TLG rose 8p to 150p yesterday as Thorn EMI, the music and retailing group that sold TLG to the management in 1991, and Lighting Limited Partnership, a venture managed by Investcorp, the Bahrain-based investment bank, announced they had found buyers for all the shares offered.

Some 50.2m of the shares were sold by LLP, leaving it with a 19.2 per cent stake. LLP has agreed not to dispose of any further shares until TLG publishes its interim results.

## Orange oil buoys Treatt

A £300,000 gain from orange oil stocks helped Treatt, the US-based supplier, blender and distiller of essential oils and aromatic chemicals, to report more than doubled interim profits. The figures were also driven by Florida Treatt, formed in 1990 to make natural orange-juice aromas. Last year it quadrupled sales.

In the six months to the end of March group pre-tax profits were £1.92m (£756,000). Sales were 65 per cent ahead at £13.5m, helped by the doubling of distillation capacity at its Suffolk plant last August.

## JKX seeks \$70m for Ukraine

By Robert Corzine

JKX, the Guildford-based independent oil company which is coming to the main market via a placing and public offering later this month, hopes to raise \$70m for joint ventures in three former Soviet republics.

A pathfinder prospectus published today will show that the company, which is involved in Ukraine, Georgia and the Russian autonomous republic of Dagestan on the Caspian Sea, will have a reserve base of 31m barrels of oil hydrocarbons, and 51bn cu ft of natural gas.

The reserves are valued at \$308m, although this is based on only two of the company's projects, according to executives.

A total of 44.8m shares are currently in issue, with total subscribed share capital of \$46.3m.

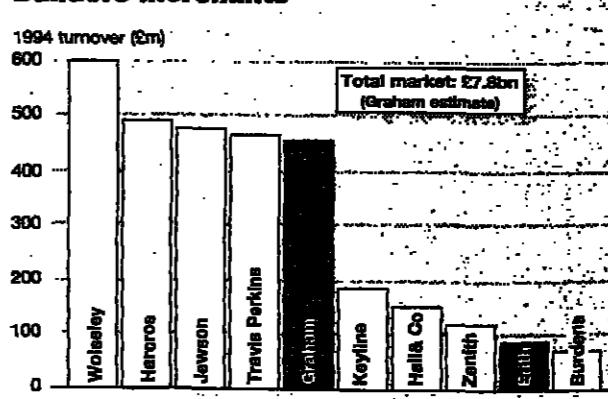
Market capitalisation is likely to be about £120m-£140m on the first day of trading.

JKX last week appointed Mr Robert Horton, the former chairman and chief executive of British Petroleum, as non-executive chairman. He will be paid \$2,000 a month, plus £1,250 a day when on company business.

Earlier this week JKX announced that Pecten International, the exploration and production arm of Shell Oil of the US, was to take a 40 per cent share in its half of a venture in Georgia.

Mr David Robson, chief executive, said most of the money raised would be devoted to projects in Ukraine, where JKX is one of the largest foreign investors. It has development and exploration rights in the Poltava onshore field and holds large exploration acreage in the Black Sea off Crimea.

## Builders' merchants



Increased market share has not been won at the expense of margins, which remain higher than at the same stage last year.



Following the DIVIDEND DECLARATION by Ford Motor Company (U.S.) on 13 April, 1995 NOTICE is now given that the following DISTRIBUTION will become payable on or after 15 June, 1995.

Gross Distribution per Unit Less 15% USA Withholding Tax

Converted at \$1.605

Claims should be lodged with the DEPOSITORY, National Westminster Bank PLC, Basement, Juno Court, 24 Princes Street, London E1 9BB on special forms obtainable from that office.

United Kingdom Banks and Members of the Stock Exchange should mark payment of the dividend in the appropriate square on the reverse of the certificate.

All other claimants must complete the special form and present this at the above address together with the certificate(s) for marking by the National Westminster Bank PLC. Postal applications cannot be accepted.

Dated 15 June, 1995

## Scottish Hydro lifts dividend 11%

By Michael Smith

Scottish Hydro-Electric said yesterday it would be another two months at least before it knew price controls for the next five years as it revealed a 10.8 per cent dividend increase.

Mr Roger Young, chief executive, said that although the Monopolies and Mergers Commission report on its distribution and supply prices was expected today, the regulator would not be constrained precisely by what it recommended. Prices may not be determined until the autumn, he said.

## CONTRACTS &amp; TENDERS



### ANDHRA PRADESH STATE ELECTRICITY BOARD

VIDYUT SUDHA, HYDERABAD - 500 049, INDIA.

#### AN INVITATION FOR SETTING UP OF PRIVATE SECTOR GAS/NAPHTHA/LSHS/FURNACE OIL BASED POWER PROJECTS IN ANDHRA PRADESH, INDIA

Andhra Pradesh State Electricity Board (APSEB) invites proposals from prospective private promoters to set up Gas/Naptha/LSHs/Furnace Oil based small generation power projects totalling to around 2000 to 3000 MWs at various locations in Andhra Pradesh, India.

Size of Individual Plants : To be offered by bidder. The minimum capacity of the power project offered shall be 100 MWs (Hundred Megawatts).

Choice of Fuel and Transportation of Fuel : To be decided by the bidder. The bidder has to take full responsibility to be up to the fuel linkage. Fuel can be imported for these projects. However, the bidder will have to either lie up or build the infrastructure requirements for fuel transportation and storage etc.

Gestation Period for Project : Within 1 1/2 years from date of signing of the Capacity and Energy Agreement which is expected to be signed within 3 to 4 months from the date of opening of bids.

Location : The locations identified are :

(1) Hyderabad (2) Krishnapatnam (3) Nizamabad (4) Suryapet (5) Renigunta (6) Jagatnada (7) Kakinada (8) Vijayawada (9) Warangal (10) Vizag (11) Muddena (12) Kurnool (13) Vemagiri

Long Gestation Period Projects : Proposals for Coal based power projects are also invited from the prospective Promoters giving details of the locations identified by them. The promoters should also be prepared to take over such of the distribution zones as may be allotted to them.

Clearances : The bidder will be responsible for obtaining all the clearances for the proposed power project.

Bidding Process : A two stage process will be followed as given below :

(1) Request for Qualification (RFQ) bids containing details on the technical and financial strengths of the bidders. (2) Request for Proposal (RFP) bids containing detailed technical and commercial aspects of the project and a firm price of power.

Sale of Power : APSEB will purchase 80% capacity of the power station until such time when distribution companies come up to purchase power, but will retain dispatch rights for the balance capacity.

The price of power to be quoted by the bidder should be based on the two-part tariff mechanism of the Government of India at a minimum plant load factor of 80%.

The norms given in the Government of India guidelines are to be treated as ceilings and the bidder is expected to offer improved norms for calculating the price, which will be composed of a fixed charge and a variable charge component. The unit price has to be quoted on a firm basis with variations allowable only due to inflation indices for fuel (to be specified by the bidder). The APSEB Board will enter into Interim Capacity and Energy Agreement with the prospective promoters.

However, the prospective promoters shall note that neither the State Government nor the Central Government will guarantee the payment obligations of the APSEB Board towards the power purchased from these projects. The prospective promoters will have to take over the distribution on their own in assigned areas or sell power to other distribution companies as and when they are established. The Capacity and Energy Agreement may be assigned by the APSEB to a Distribution Company, as and when such Companies are set up.

Submission of bids : The interested bidders can collect the Tender documents giving details, against payment of Rs. 1000/- in the form of Demand Draft payable in favour of Pay Officer, APSEB, Hyderabad - 500 049 (India) from The Chief Engineer (Planning), Andhra Pradesh State Electricity Board, Vidyut Soudha, Hyderabad - 500 049 (India). The tender documents will be available for sale from 1.6.1995.

Interested bidders should send in their proposals on or before 12.00 noon on 31.7.1995 to the above address accompanied by a processing fee of Rs. 2.00 Lakhs in the form of Demand Draft in favour of Pay Officer, APSEB, Hyderabad - 500 049, India and a refundable EMD of Rs. 100 Lakhs. (Rs. 20 Lakhs in the form of Demand Draft in favour of Pay Officer, APSEB, Hyderabad - 500 049, India drawn on any Scheduled Bank in Hyderabad and Rs. 80 Lakhs in the form of Bank guarantee)

APSEB reserves the right to reject all or any of the proposals without assigning any reasons therefor.

Fax : 91-040-393317 Chief Engineer (Planning)

Telex : 0425-615 APEB IN Andhra Pradesh State Electricity Board,

EPABX : 91-040-3936000 Vidyut Soudha, Hyderabad - 500 049.

Extn. : 3489 INDIA. (R.O. No.171/95)

## Goldsborough rises 68% but shares dip

By Motoko Rich

Shares in Goldsborough Healthcare, the nursing homes, hospitals and homecare group, fell 11p to 154p as a 68 per cent increase in pre-tax profits failed to meet analysts' expectations.

Pre-tax profits in the six months to April 2 rose from £9.8m to £23m on turnover up 26 per cent to £24.37m (£21.29m). The company disclosed its first dividend of 9.67p to take the full year to 14.01p, 10.8 per cent increase on 12.64p.

Earnings were 2.3 per cent down at 31p (31.7p).

Earnings were affected by £1.8m associated with debt redemption, £2m for the MMC review, and £1.45m for future reorganisation costs. However, the offer document for the rights issue, underwritten by

consideration could be funded from the group's internal finances.</p



## INTERNATIONAL CAPITAL MARKETS

## Germany falls on Bundesbank caution

By Graham Bowley in London and Lisa Bransten in New York

Disappointment over the Bundesbank's decision to leave interest rates on hold at yesterday's council meeting pushed German government bonds lower yesterday.

Although the market consensus was for no change in monetary policy at yesterday's meeting, traders reacted negatively to comments by council members, including Dr Otfried Issing, the chief economist, which suggested that the central bank would continue to be cautious towards interest rates.

A weaker US Treasury market also acted as a downward influence, as bond prices across most of the European markets slid lower.

The yield on the 10-year benchmark bond rose to 6.74 per cent, while the September bond futures contract traded on Liffe in London fell back to 94.02, down 0.34 on the day.

The 10-year bond yield spread over US Treasuries settled at around 51 basis points.

Traders also cited some selling by US hedge funds of their European government bond holdings as another reason for falling prices across Europe.

"This selling hit the gilt and bond market earlier in the week and the French market yesterday," said Mr Ian Williams, gilt specialist at Kleinwort Benson in London.

The 7.5 per cent 2005 French government bond fell 100.09. The September notional futures contract on Matif settled at 114.96, down 0.52.

Dealers said that attention today will be on the G7 meeting in Canada, although trading is expected to be quiet with German financial markets closed for a holiday.

The weaker tone in Europe and the US dragged UK government bonds lower, in spite of supportive economic data.

Gilts were hardly moved by the announcement by Mr Kenneth Clarke, the chancellor, of the extension of the government's existing target for UK inflation beyond the next general election.

The announcement came in after-hours trading and was largely in line with traders' expectations.

## GOVERNMENT BONDS

"It is fairly neutral for the market," said Mr Stephen Hanrahan, director of research at IBI. "It does not suggest any easing or watering down of its commitment to keeping inflation down."

Gilts were supported in early trading by labour market statistics showing muted average earnings growth, but prices fell back in later trade. The long gilt future on Liffe was down 51 at 106.41 in late trading. The

10-year yield spread over bonds was at 146 basis points, while the spread over US Treasuries stood at 197 basis points.

■ US Treasury bonds yesterday gave up some of the gains made after Tuesday's rally as traders took profits and tried to assess the course of monetary policy.

By midday the benchmark 30-year Treasury was down 15 at 113.8 to yield 6.66 per cent. At the short end of the maturity spectrum, the two-year rate was 15 lower at 100.6 to yield 5.645 per cent.

The economic data released yesterday added to the recent string of figures showing inflationary pressures easing. But the figures did little to boost bonds because all of the news related to economic activity in the first quarter.

Bonds briefly moved higher after the Commerce Department reported April business inventories up 0.8 per cent, a rate of 3.4 per cent rise.

Attention was focused on May capacity utilisation and industrial production data due later today for clues on the economy in the second quarter.

The dollar gave little in the way of direction for the market. At midday it was mixed against the yen and the D-Mark, trading at 104.36 and DM1.4083 against Yen 104.28 and DM1.4083 late on Tuesday.

## CWB sells 70% stake in Swedish textile group

By Simon Kuper

Hambros Bank has arranged a £50m loan for Sanctuary Housing Association. The bank claims this is the largest loan ever made to a British housing association.

The main providers of housing for the poor, associations manage more than 900,000 homes in the UK.

Hambros, which arranged the loan, will supply £20m, with £30m coming from Abbey National Treasury Services. The loan matures in three years, but is provided on a revolving basis.

Mr David Knowlton, finance director of Sanctuary, said the interest rate on the loan was "30 basis points inside the previous facility we had with NatWest".

In recent UK deals, associations have borrowed long-term funds at 150 to 170 basis points over rates.

The fixed charges will provide an asset cover ratio of 125 per cent, which Hambros said

was "amongst the lowest seen in the sector".

Housing associations have borrowed about £700m since the Housing Act of 1988 made them partly reliant on private capital.

Mr Derek Gordon, a Hambros manager, said: "The market at the moment is the most beneficial housing association will have seen ever."

He said there was "a huge supply of funding as banks were underfunded, and little demand for loans, as associations had seen a fall in government grants from £1.8bn in 1993-94 to £1.15bn this year".

Mr Knowlton said banks had become more willing to lend since one or two UK associations, including Sanctuary, had applied for credit ratings. He said: "This deal wasn't difficult to put together with Hambros and Abbey National."

He said Sanctuary was considering another US bond issue. Last November, it became the first housing association to raise funds on the American market, with a \$70m issue.

The association, which manages more than 21,000 homes and is based in Herford, is among the 10 largest housing associations in the UK.

## Sanctuary housing group raises £50m

By Antonia Sharpe

CWB Capital Partners, the London-based acquisition fund which specialises in buying market-leading manufacturing companies in northern Europe, yesterday raised \$33m (£19.17m) HSBC Markets.

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Ireland - Central Bank of Ireland	
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Buying - Sale of units.	
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(n) - 1100 to 1400 hours	
(u) - 1401 to 1700 hours	
(d) - 1701 to midnight	
a - Exit charge on sale of units.	
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f - Floating price - Future pricing	
b - Premium or discount free of UK taxes.	
p - Periodic payment insurance plan.	
g - Capital protection insurance.	
m - Occupied as a UCITS Undertaking for Collective Investment in Transferable Securities.	
s - Offered price includes all expenses except agent's commission.	
z - Previous day's price.	
bb - Treasury price.	
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nd - Ex-ordinal.	

## MARKET REPORT

## Bond market weakness unsettles equities

By Steve Thompson, UK Stock Market Editor

UK equities delivered a disappointing performance yesterday, ignoring another burst of takeover speculation and reflecting a decidedly edgy opening performance by Wall Street.

The latter was unsewed at the opening by the weak performance of US Treasury bonds, which in turn affected bonds, bonds and gilts across European markets.

Dealers ascribed the fall in US markets to growing unease about the dollar, which dropped below the crucial \$1.40 level against the D-Mark yesterday after news that

the Bundesbank had left German interest rates unchanged. There had been no real conviction in the market that the Bundesbank would lower German rates but dealers said sentiment in the US currency had worsened after the news was made public.

The FTSE 100 Index of leading stocks ended the session a net 3.2 lower at 3,338.8, while the FTSE Mid 250 Index was more resilient, closing only 3.7 off at 3,632.9.

There was no real build-up of downside pressure in London, dealers said. "The market feels slightly worn out," said the head of derivatives activity at one of the leading UK securities houses. He added that

most of the domestic economic news emerging in recent sessions was viewed as moderately bullish for gilts and therefore for equities, but that this was balanced by some fairly aggressive selling pressure in the futures and options markets.

The consensus was that the market was unlikely to track on the downside in the short term, unless Wall Street stages a substantial reversal.

The deputy head of trading at one big European securities house noted that any significant dips in the equity market were seen as opportunities for those holding short trading books to cover positions.

Good reasons for the market's

reluctance to move ahead strongly on Tuesday emerged early in the session with news of a £137m rights issue from FKI, the electrical engineering group, and the placing of 57.5m shares in TLG by its previous owner Thorn EMI and Investcorp, a Bahrain-based investment company. Together, the two deals will take out some £220m of investment funds.

The market was in good form at the opening when the FTSE 100 opened more than 13 points higher, with early buying again fuelled by takeover talk concerning Cable and Wireless, Zeneeca and Thorn EMI. All three stocks have long been seen as potential targets.

There was some hard bid news. Graham Group, the builders merchant floated last year, agreed a takeover of rival Brith.

The Footsie stayed in positive territory throughout the morning but began to lose momentum over lunchtime when gilts improved an abrupt reversal in US bonds.

Among the so-called bid targets, Cable and Wireless ran out of steam, but Zeneeca continued to move ahead and Thorn EMI responded to merger speculation.

Turnover in equities expanded to 743.2m shares, well above recent levels, although 20 per cent of the total was accounted for by 153m shares that were traded in TLG.

## Kleinwort bid talk increases

The market's takeover appetite alighted on Kleinwort Benson again. But yesterday some punchy turnover suggested that there was real weight behind the rumours as the stock moved to a new all-time high.

Kleinwort jumped 23 to 724p and volume of 3.1m shares was one of the heaviest daily turnovers recorded in the merchant bank. Dealers and banking analysts said there were few dramatic new twists to the takeover story but pointed out that more than three times the normal level of shares went through the dealing system. And one specialist said the bank was holding a board meeting yesterday.

Mr Neil Baker of Credit Lyonnais said that on fundamentals alone the stock was worth only 55p. "There must be at least a 25 per cent of bid premium in the current price," he said.

The principal perceived aggressors are Dresdner Bank, of Germany, or the Dutch ABN Amro. Analysts are convinced that an offer of 650p a share would be sufficient to clinch the merchant bank. However, most of the trades yesterday were in small lots of 10,000 to 20,000 shares, suggesting activity by marketmakers and speculative investors. "We have seen it with Zeneeca; there is a lot of bid rumour activity in the market and those who

were sellers are now holders," said one dealer.

Zeneeca climbed 24 to 1072p, a new closing high. Bid rumours have circulated for more than a week, with attention focusing on Roche as the most likely predator.

## Airways advances

Transport leader British Airways stood out again yesterday, rising 7 to 412p, US buying on the back of Wall Street's recent enthusiasm for airline stocks - United Airlines has advanced 5 per cent this week, was said to lie behind the upturn.

Sentiment was also aided by Far Eastern interest as the flotation of Qantas, the Australian carrier in which BA has a 25 per cent stake, moved to the prospectus stage. BA was well ahead, volume reaching 7.9m shares.

NFC held its interim dividend but the half-year results fell short of market expectations and the shares fell 5 to 164p. The transport team at UBS cut by a tenth to 950p.

## Reuters improves

News and financial information group Reuters Holdings was the best performing Footsie stock, with the shares moving ahead 12% to 510p.

Goldman Sachs was said to have been buying aggressively, although the house refused to comment. Although many of Reuters' dealing and information screens are sold on fixed contracts, there is perceived to be a strong link between the level of activity in the market and the Reuters share price.

News of a £137m rights issue

at 125p a share from FKI, the acquisitive electrical engineering group, overshadowed the good results. The shares retreated 5 to 145p.

Demerger talk at Thorn EMI returned to the market yesterday and sent the shares through the 1300p level to finish 25 at 131p in busy trading of 3.1m.

The company has been having meetings with some of its leading investors and was said to have met with investors at ABN Amro yesterday.

Thorn, together with Investcorp, a Bahrain-based investment bank, yesterday sold a total of 57.5m shares in TLG, a lighting systems company, at 150p a share.

The sale left Thorn with a 2.8 per cent holding in the group, though Lighting Limited Partnership, a partnership managed by Thorn and Investcorp, is to retain a 19.2 per cent holding. TLG shares closed 8 up at 155p, with a total of 153m having been traded by the close.

Rolls-Royce shed a penny to 184p in spite of a steady stream of good news on orders coming out of the Paris air show and a restructured buy stance from agency broker Henderson Crosthwaite.

British surged 28 to 105p following an agreed bid worth 107p a share from Graham Group, a builders merchant rival spun-off from diversified industrial leader BTR last year. Graham finished 4 cheaper at 178p.

ICI fell 21 to 764p, with some analysts apparently drawing conclusions from comments made in the US by chemicals company Rohm & Haas.

On Tuesday, Rohm & Haas said it was experiencing a slowdown in both North and Latin American business and it was unlikely that the company would exceed 1994's second-quarter earnings in the same

period this year.

Selling began in the US on Tuesday night when ICI's American Depository Receipts slipped 7 to \$43.

Power generator Scottish Hydro, which yesterday reported figures in line with market expectations, gained 6 to 242p, in active buying ahead of today's publication of a Monopolies and Mergers Commission report into prices.

Scottish Hydro requested the investigation last year, and dealers expect the MMC findings will favour the company. UBS was said to have been among the day's biggest buyers of stock and turnover rose to a hefty 8.6m, its highest level for nearly a year.

United News & Media, which has been seeing analysts this week, fell 8 to 508p on talk of a downgrading by BZW. The investment bank is said to be worried about slower than expected advertising growth, higher newsprint costs in the second half and spending on new titles.

Telecoms shares fell back, succumbing to modest profit-taking after two days of near fever pitch activity. Cable and Wireless retreated 3 to 456p as some of the frothier takeover stories subsided while mobile phone group Vodafone's earnings per share rose 32% to 262.8p.

Volume in the sector remained high and for the second day running there was heavy derivatives activity in C&W, C&W shares traded 14m to head the Footsie activity chart while BT, seen by the stock market earlier this week as a determined suitor for C&W, gained a penny to 393p in 11m turnover. Vodafone in 11m turnover. Vodafone

traded 8.9m.

Retailer WH Smith closed 2 down 348p, after Morgan Stanley downgraded profit expectations. Miss Julie Ramsay at the US investment bank reduced current year profit expectations by 27m to £108m. Explaining the move, Miss

Ramsay said: "We expect more under performance in WH Smith's core chain and expect slow progress to be made particularly in the light of a tough trading environment."

Average cables group Delta, which has come up from 430p since mid-March, fell 9 to 504p as word went round that some houses were shading their estimates ahead of the interim results, due in August.

Smith New Court moved from buy to hold on the shares and sliced 22m off its estimates for 1995 as a whole.

GEC continued to edge higher, finishing 1/4 harder at 331.5p. The shares stood at 322p immediately after the £283m cash takeover bid for submarine group VSEL.

International motor trader Inchipace was again Footsie backmarker, tumbling 9 to 288p for a two-day decline of 17% as worries about Far East

continued to build in the wake of this week's gloomy annual meeting statement from Jardine International Motors.

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FINANCIAL TIMES THURSDAY JUNE 15 1995

## WORLD STOCK MARKETS

INDEXES

	Jan 14	Jan 13	Jan 12	High	1995
					Low
Argentina General (25/12/77)	(d) 14700.57	14433.26	14831.10	2/1	9831.00 9/3
Australia					
All Ordinaries(1/1/80)	1966.5	1978.9	(d) 2077.50	9/5	1822.30 8/2
All Minot(1/1/80)	851.9	861.0	(d) 952.00	19/4	785.30 8/2
Austria					
ATX (Cik Aden)(30/12/84)	374.25	375.45	377.62	395.42	2/1 359.92 30/3
Trade Index(21/1/91)	1016.62	1020.91	1027.69	1038.31	2/1 934.63 30/3
Belgium					
Bel 20 (1/1/91)	1411.53	1414.80	1412.14	1480.34	12/5 1271.53 9/3
Brazil					
Bovespa (25/12/83)	(d) 37880.0	37048.0	43390.0	2/1	21382.00 9/3
Canada					
Montreal 40(1975)	(d) 4322.54	4324.16	4391.48	8/6	3606.63 1/3
Composite(1975)	(d) 4492.10	4465.80	4492.10	13/8	3691.41 30/1
Portfolio 55 (4/1/83)	(d) 2271.26	2207.37	2218.23	8/6	1848.39 30/1
Chile					
GPA Bas (31/12/88)	(d) 6932.57	6929.8	6911.00	6/8	4676.98 9/3
Denmark					
CopenhagenSE(31/1/83)	358.88	356.16	355.55	360.07	26/5 330.01 29/3
Finland					
ESI General(25/12/80)	1853.3	1870.3	1884.4	1940.30	10/1 1925.30 29/3
France					
BF 250 (21/12/90)	1264.27	1277.23	1272.12	1322.38	12/5 1183.14 10/3
BF 40(31/12/87)	1833.55	1922.75	1907.75	2017.27	12/5 1721.00 13/3
Germany					
ATX Aden(31/12/88)	783.41	770.72	777.62	796.81	16/2 708.37 30/3
Commerzbank(1/1/83)	2249.2	2257.5	2238.1	2280.07	16/2 2032.70 30/3
WDX (01/12/87)	2128.02	2115.11	2118.56	2146.40	8/6 1916.00 28/3
Greece					
Atena SE(31/12/80)	910.40	908.68	(d) 955.01	8/5	767.15 16/3
Hong Kong					
Hang Seng(31/7/84)	9264.77	9103.17	9121.45	9870.37	5/6 8887.93 23/1
Iceland					
ISX Sema (1979)	3324.85	3299.47	3318.54	3832.00	2/1 3019.07 3/5
Indonesia					
Stocks Comp.(10/9/82)	493.32	488.291	497.31	497.28	5/6 414.21 18/4
Ireland					
SEI Overall(4/1/88)	1856.21	1944.12	1944.60	1980.08	8/6 1813.50 23/1
Italy					
Finance Comm Ital (1972)	564.81	505.35	611.01	880.54	10/2 557.88 23/3
ISX General (2/1/85)	950.0	951.0	957.0	1070.00	10/2 929.00 23/3
Japan					
Nikkei 225 (16/5/89)	14660.49	14599.68	14813.46	18723.00	2/1 14698.48 13/6
Nikkei 300 (1/10/82)	223.10	222.28	224.57	257.17	2/1 222.28 13/6

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## AMERICA

## Equities turn positive after early declines

## Wall Street

US share prices turned positive in early afternoon trading yesterday after a morning in which investors took profits off the top of Tuesday's gains, writes Lisa Branstien in New York. The Dow Jones Industrial Average moved as much as 20 points lower in morning trading but managed to push into positive territory after midday. At 1 pm the Dow was 0.69 ahead at 4,855.20, while the Standard & Poor's 500 was off 0.27 at 535.78. The American SE composite climbed 5.22 to 496.61 and the Nasdaq composite gained 0.19 at 894.24. New York SE volume amounted to 187.5m shares.

Both the stock and bond markets had swung up and down markedly since the beginning of this month as investors speculated about the course of monetary policy.

Yesterday's data, showing strong productivity gains in the first quarter and a modestly higher than expected inventory growth in April, drew little reaction because the figures were too old to provide much insight about

the second quarter.

Cyclical shares fell amid uncertainty about Fed policy and the strength of the economy. The Morgan Stanley index of cyclical shares fell 0.6 per cent while the counterpart index of consumer shares remained flat. Declining cyclical shares included Rohm & Haas, which fell 2.2% at \$51 after saying that it did not expect second quarter net income to exceed that of the same period last year. Honeywell fell \$1 at \$40 and Eaton lost \$1 at \$55.

Shares in companies that provide managed healthcare fell sharply after Humana said that it expected second quarter earnings to be below analysts' estimates due to rising medical costs. Humana lost 15 per cent or \$3.2 at \$19. United HealthCare was 2.2% at \$40. Mid Atlantic Medical Services dropped 1.1% and Foundation Health 1.1% at \$39. On the Nasdaq, Oxford Health Plans fell 2.2% at \$57.5, US Healthcare 1.1% at \$32.4, FHP International 1.1% at \$22.4 and Pacificare Health Systems 1.1% at \$37.

Cor Therapeutics lost nearly 47 per cent or \$3.2 at \$10 after reporting unfavorable results from the test of a drug developed to treat patients undergoing coronary angioplasty surgery.

## Canada

Toronto resisted the New York slide with help from gold and the consumer products division. The TSE 300 Composite index was 2.50 higher at 4,494.60 at 1 pm, with the gold and precious metals index up 101.28 at 10,548.76 as bullion reached \$387.75 an ounce in London.

Industrials were generally weak but consumer products, like gold, up on a percentage point. Seagram continued to gain on the MCA/DreamWorks distribution deal, adding C\$4 at C\$43.

## SOUTH AFRICA

Johannesburg posted some late gains as the bullion price made ground in New York. However, sentiment remained nervous on the uncertain outlook for interest rates, which could hit earnings growth prospects in the industrial sector. The overall index was 4.1 better at 5,310.8, industrials picked up 6.7 at 6,791.5 and golds added 11.5 at 1,402.5.

## Argentina hit by car exports fears

Buenos Aires fell 2.1 per cent in morning trade, hurt by the prospect of curbs on its car exports to Brazil, which had been helping Argentina to reduce its trade deficit.

The Merval index, which had rebounded earlier this week after last week's 11 per cent loss, was standing 8.8 lower at 405.19.

Brokers noted that Brady bonds and ADRs showed heavy falls on Wall Street, although it was still unclear whether car import quotas,

were under study by Brazil, would apply to the Mercosur customs union of which it is a member.

SAO PAULO picked up from early lows but was still weak in midday trade on speculative selling during the day's futures index settlement. The Bovespa index was down 21.9 at 37,674 at 1 pm in low turnover of R\$195.6m (\$21.6m).

MEXICO CITY saw early profit-taking after Monday's gains and the IPC index was 12.41 easier at 1,971.36 in morning trade.

## EMERGING MARKETS: IFC WEEKLY INVESTABLE PRICE INDICES

Market	No. of stocks	Dollar terms			Local currency terms			June 9 1995	% Change over week	% Change on Dec 31 1994	June 9 1995	% Change over week	% Change on Dec 31 1994
		1995	1994	1995	1994	1995	1994						
Latin America	(254)	459.90	-4.6	-20.9	-	412,389.93	-10.2	-	-8.5	-	-	-	-
Argentina	(30)	672.19	-10.3	-9.5	-	1,022.23	-10.2	1,022.23	-10.2	1,022.23	1,022.23	1,022.23	1,022.23
Brazil	(72)	303.69	-6.7	-21.0	-	1,036.92	-5.7	-	-14.9	-	-	-	-
Chile	(35)	910.49	+1.4	+16.1	-	1,345.88	+0.1	-	+6.8	-	-	-	-
Colombia <sup>1</sup>	(16)	763.55	+10.5	-5.9	-	1,178.97	+10.0	-	-1.4	-	-	-	-
Mexico	(88)	406.28	-4.1	-33.2	-	1,085.78	-3.4	-	-15.8	-	-	-	-
Peru <sup>2</sup>	(20)	183.21	-5.1	-2.7	-	252.24	-4.9	-	+6.1	-	-	-	-
Venezuela <sup>3</sup>	(12)	392.59	-0.2	-19.5	-	1,555.76	-0.2	-	-19.5	-	-	-	-
Asia	(857)	258.38	-1.6	-3.6	-	-	-	-	-	-	-	-	-
China <sup>4</sup>	(20)	70.95	-0.6	-6.5	-	74.43	-0.7	-	-8.1	-	-	-	-
South Korea <sup>5</sup>	(159)	127.10	-1.1	-7.1	-	127.86	-0.8	-	-9.8	-	-	-	-
Philippines	(25)	295.73	-0.3	-0.8	-	368.24	-0.6	-	+4.8	-	-	-	-
Taiwan, China <sup>6</sup>	(93)	128.48	-2.3	-21.9	-	123.90	-2.3	-	-23.8	-	-	-	-
India <sup>7</sup>	(101)	101.95	-0.7	-17.4	-	113.78	-0.7	-	-17.3	-	-	-	-
Indonesia <sup>8</sup>	(42)	108.95	-0.7	-9.2	-	131.59	-0.7	-	+10.5	-	-	-	-
Malaysia	(114)	302.07	-2.4	+12.4	-	272.05	-2.9	-	+7.4	-	-	-	-
Pakistan <sup>9</sup>	(36)	282.66	+3.7	-22.8	-	397.15	+3.7	-	-22.4	-	-	-	-
Sri Lanka <sup>10</sup>	(19)	133.03	+10.9	-22.6	-	143.84	+11.3	-	-22.4	-	-	-	-
Thailand	(68)	420.45	-1.0	+9.6	-	411.43	-0.8	-	+7.6	-	-	-	-
Euro/Mid East	(210)	137.58	+0.3	+16.1	-	-	-	-	-	-	-	-	-
Greece	(40)	258.76	+1.7	+14.7	-	384.97	+1.6	-	+7.4	-	-	-	-
Hungary <sup>11</sup>	(5)	126.84	-0.4	-16.4	-	186.34	-0.3	-	-9.8	-	-	-	-
Jordan	(8)	187.88	+1.4	+25.3	-	274.75	+1.7	-	+23.6	-	-	-	-
Poland <sup>12</sup>	(16)	455.99	+5.8	-2.8	-	672.72	+6.2	-	-6.6	-	-	-	-
Portugal	(28)	125.17	-0.2	+3.4	-	126.28	-1.3	-	-4.7	-	-	-	-
South Africa <sup>13</sup>	(64)	228.00	-1.6	+1.5	-	172.93	-1.7	-	-8.6	-	-	-	-
Turkey <sup>14</sup>	(44)	161.85	+12.3	+49.4	-	3,683.91	+12.4	-	+68.5	-	-	-	-
Zimbabwe <sup>15</sup>	(5)	259.76	-1.3	+8.2	-	325.20	-3.7	-	+7.9	-	-	-	-
Composites	(1121)	282.57	-1.6	-8.1	-	-	-	-	-	-	-	-	-

Indices are calculated at end-of-week, and weekly changes are percentage movement from the previous Friday. Base date: Dec 1986/100 except those noted which are: IFC 1/1991; IFC 2/1992; IFC 3/1992; IFC 4/1992; IFC 5/1992; IFC 6/1992; IFC 7/1992; IFC 8/1992; IFC 9/1992; IFC 10/1992; IFC 11/1992; IFC 12/1992; IFC 13/1992; IFC 14/1992; IFC 15/1992; IFC 16/1992; IFC 17/1992; IFC 18/1992; IFC 19/1992; IFC 20/1992; IFC 21/1992; IFC 22/1992; IFC 23/1992; IFC 24/1992; IFC 25/1992; IFC 26/1992; IFC 27/1992; IFC 28/1992; IFC 29/1992; IFC 30/1992; IFC 31/1992; IFC 32/1992; IFC 33/1992; IFC 34/1992; IFC 35/1992; IFC 36/1992; IFC 37/1992; IFC 38/1992; IFC 39/1992; IFC 40/1992; IFC 41/1992; IFC 42/1992; IFC 43/1992; IFC 44/1992; IFC 45/1992; IFC 46/1992; IFC 47/1992; IFC 48/1992; IFC 49/1992; IFC 50/1992; IFC 51/1992; IFC 52/1992; IFC 53/1992; IFC 54/1992; IFC 55/1992; IFC 56/1992; IFC 57/1992; IFC 58/1992; IFC 59/1992; IFC 60/1992; IFC 61/1992; IFC 62/1992; IFC 63/1992; IFC 64/1992; IFC 65/1992; IFC 66/1992; IFC 67/1992; IFC 68/1992; IFC 69/1992; IFC 70/1992; IFC 71/1992; IFC 72/1992; IFC 73/1992; IFC 74/1992; IFC 75/1992; IFC 76/1992; IFC 77/1992; IFC 78/1992; IFC 79/1992; IFC 80/1992; IFC 81/1992; IFC 82/1992; IFC 83/1992; IFC 84/1992; IFC 85/1992; IFC 86/1992; IFC 87/1992; IFC 88/1992; IFC 89/1992; IFC 90/1992; IFC 91/1992; IFC 92/1992; IFC 93/1992; IFC 94/1992; IFC 95/1992; IFC 96/1992; IFC 97/1992; IFC 98/1992; IFC 99/1992; IFC 100/1992; IFC 101/1992; IFC 102/1992; IFC 103/1992; IFC 104/1992; IFC 105/1992; IFC 106/1992; IFC 107/1992; IFC 108/1992; IFC 109/1992; IFC 110/1992; IFC 111/1992; IFC 112/1992; IFC 113/1992; IFC 114/1992; IFC 115/1992; IFC 116/1992; IFC 117/1992; IFC 118/1992; IFC 119/1992; IFC 120/1992; IFC 121/1992; IFC 122/1992; IFC 123/1992; IFC 124/1992; IFC 125/1992; IFC 126/1992; IFC 127/1992; IFC 128/1992; IFC 129/1992; IFC 130/1992; IFC 131/1992; IFC 132/1992; IFC 133/1992; IFC 134/1992; IFC 135/1992; IFC 136/1992; IFC 137/1992; IFC 138/1992; IFC 139/1992; IFC 140/1992; IFC 141/1992; IFC 142/1992; IFC 143/1992; IFC 144/1992; IFC 145/1992; IFC 146/1992; IFC 147/1992; IFC 148/1992; IFC 149/1992; IFC 150/1992; IFC 151/1992; IFC 152/1992; IFC 153/1992; IFC 154/1992; IFC 155/1992; IFC 156/1992; IFC 157/1992; IFC 158/1992; IFC 159/1992; IFC 160/1992; IFC 161/1992; IFC 162/1992; IFC 163/1992; IFC 164/1992; IFC 165/1992; IFC 166/1992; IFC 167/1992; IFC 168/1992; IFC

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## FINANCIAL TIMES SURVEY

# TELECOMMUNICATIONS IN BUSINESS

Thursday June 15 1995

**T**elecommunications users are, and will continue to be, the chief beneficiaries of successive waves of liberalisation and privatisation which are reforming the global telecoms business.

Prices are falling, new and attractive services are on offer and in the offing, and in many countries choice of operator is having their wishes met - often for the first time.

Business users are demanding better, cheaper and more flexible services from telecoms companies with some hope of having their wishes met - often for the first time.

Reform is likely to be steady rather than dramatic, however.

In Europe it will be years before the bureaucratic and arrogant attitudes ingrained in many telecoms operators - through a deadly combination of state ownership and monopolistic service provision - are eliminated.

British Telecommunications, for example, privatised in the early 1980s, is only now emerging as an aggressive, world-class competitor. AT&T, the largest US long-distance carrier, is building alliances around the globe but still suffers from a certain insularity of attitude.

This is the justification for the formation last year of the European Virtual Private Network Users' Association, a lobby of 40 of Europe's largest companies including big banks and leading manufacturers. They aim to force the large telecoms operators to listen to their requirements.

Mr John Sale, who works for EDS of the US, chairs the group.

He says that pan-European companies had in the past found monopolist operators turning a deaf ear to their wishes.

Now by acting in concert the group can demand lower prices and better services in advance of the January 1, 1998 deadline for the liberalisation of telecoms in most European economies.

At the same time, telecoms and computing seem to be converging, finally, to give real substance to the idea of an information technology revolution. There have been many false dawns over IT in the past three decades but the enor-

Analysts are agreed that customer attitudes are becoming the principal determining factor in the development of telecoms. It will be a testing new experience. Alan Cane reports

## Customers have the advantage



Telecommunications and computing seem to be converging

BT Picture

mous interest in the Internet - a worldwide but primitive and anarchic computer network - suggests that the potential of linking high-speed communications to computer processing is now broadly appreciated.

Electronic mail on the Internet, for example, is beginning to replace facsimile as a business tool. The problem of introducing security to an essentially insecure network - the Internet pioneers wanted it to be easy to connect to) is being addressed. And a number of significant companies - including First Union

Corporation in the US and Barclays Bank in the UK - are introducing shopping and payment services over the Internet designed to be proof against fraud. In France, it is now possible to access "Minitel" services over the Internet.

The popularity of mobile telephony, however, is bringing its own problems. Cellular technology makes the best use of available wavelengths, but there is a limit to the number of subscribers who can be accommodated. GSM (Global

System for Mobile telephony) was introduced as a high quality service for business use. GSM is now standard across Europe and increasingly, the rest of the world.

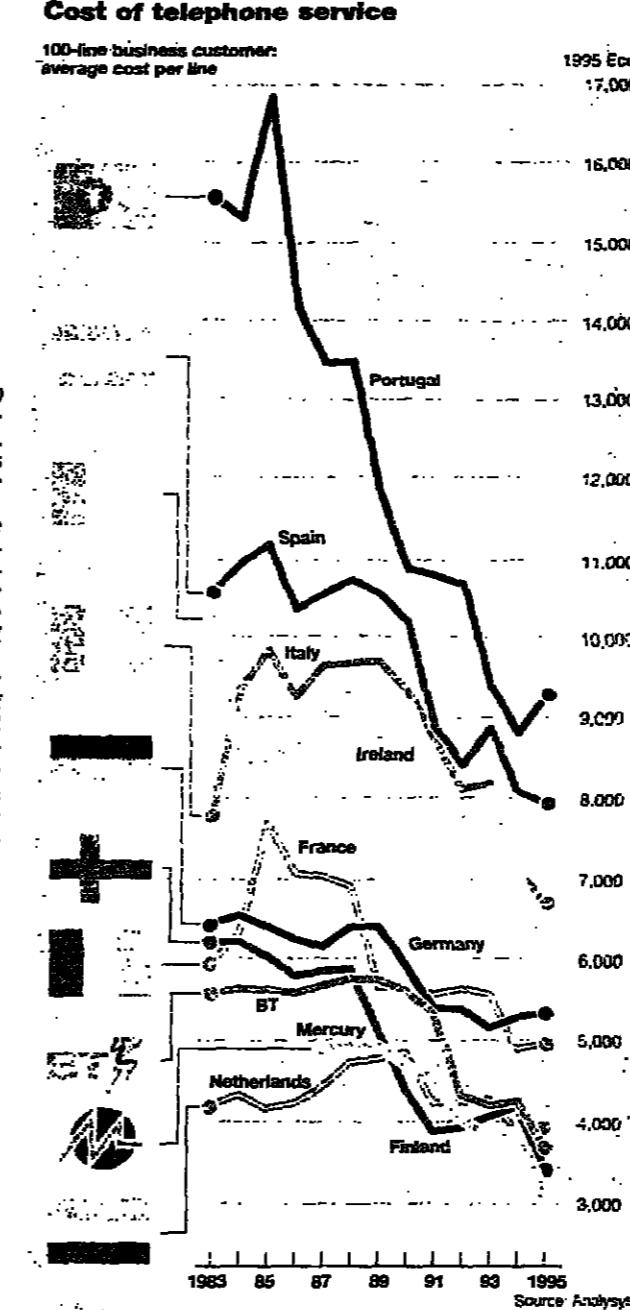
In some areas where mobile telephony proved an early success - Scandinavia, for example - the airwaves are already cluttered and operators are seeking to exploit new parts of the radio spectrum.

Mobile subscribers already represent about 17 per cent of the number of fixed lines and the proportion is growing rapidly. With the evolution of the world phone, a hand-held device able to switch automatically from cordless operation in the office to cellular operation in the city and to satellite transmission in remote areas, fixed lines may be increasingly for the information superhighway, the carrier for multimedia services.

Finally, business customers themselves are facing structural upheaval along with the prospect of new and intensifying competition: shortened product development cycles and time to market; and rapid technological change. They are competing in time and have to hone their telecoms activities to match the challenge.

Many have decided they no longer want the difficulties and problems of managing their own IT operations and have outsourced them to a third party. The largest telecoms operators have allied themselves into consortia to provide "managed network services" - essentially to run global networks on behalf of their large customers. British

### Cost of telephone service



Source: Analysys

have to deal with a plethora of authorities and regulations.

Telecoms costs are low in countries where liberalisation has encouraged free competition, among them the US, the UK, Sweden and New Zealand. In anticipation of competition, prices have been falling across Europe. In some countries, however, telecoms charges still represent a substantial extra burden on business.

Analysts - a Cambridge, UK-based consultancy which specialises in telecommunications costs - estimates the total average cost per line in European Currency Units, for a 12-line business customer, as Ecus2,456 for a customer of Deutsche Telekom, Ecus2,269 for a customer of France Telecom but only Ecus1,888 for a customer of Mercury Communications in the UK.

The key to the new services that customers are now enjoying and can anticipate for the future is the intelligence which resides in modern networks and switching systems. Telephone exchanges are today merely large computers; what they can accomplish is determined by the software which runs on them. Virtual private networks - which provide the services typically available only through a private network over the public switched system - and bandwidth-on-demand are two of new possibilities from intelligent networks.

Analysts are agreed that customer attitudes are becoming the principal determining factor in the development of telecoms: "In the future, there will be no loyalty in the customer base," says Andersen Consulting. "Until recently customers had to settle for what carriers offered at set prices. As their options open up, they will begin to treat telecoms service providers like any other supplier, demanding competitive prices and customised service to meet their needs. If customers do not get what they want, they will switch."

It will be a testing new experience for customers to dictate their telecoms requirements: now that the confluence of circumstance has given them the advantage, it should not be relinquished lightly.

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Production Editor: Philip Sanders

In the new world of communications networks, one word stands for change.

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Interview: Malcolm Wollaston of 3M on a big user's requirements

## Global operators needed

It is the perfect demonstration of 3M's commitment to leading edge telecommunications. Malcolm Wollaston, the company's global telecommunications manager, welcomes you into his office and the meeting begins: suddenly his desktop computer imposes its presence on the discussion.

Images of Mr Wollaston in his Bracknell, UK, office together with another neatly suited executive appear in separate windows on the screen as the loudspeaker crackles into life. It is a colleague calling from Brussels, courtesy of desk-top video.

The system, built around technology from the US company PictureTel, is set up for urgent communications. It interrupts whatever Mr Wollaston is doing just like a telephone call. "We have invested \$1m in this technology, partly to cut the cost of travel but principally to accelerate decision-making," Mr Wollaston says.

"A 3M production facility in Japan came to a standstill. We needed to consult with the specialists in our US laboratories and engineering facilities. We hooked up a videoconferencing system in four hours to link 22

experts and we had that production line rolling in 13 hours. The team would not have been half way over the Pacific by the time we had the problem solved."

Mr Wollaston, with almost 30 years' experience in 3M during which time he has been responsible for the group telecommunications operations in the UK, Europe and now worldwide, is accustomed to thinking globally.

3M, which makes everything from adhesives and fabrics to speciality chemicals, has operations in 51 countries, employs 85,000 people and markets 60,000 products. Turnover

**Data transmission represents only a fifth of the company's telecoms spend, but it is critical for business development**

is \$15bn.

Mr Wollaston is rarely satisfied in his search for telecommunications suppliers who can meet the company's global aspirations. He points out: "There are a number of companies who describe themselves as global, but with all due humility, 3M could show these

companies what being global really means."

"KDD of Japan, AT&T of the US, BT here in the UK: all of these companies would claim to be global operators but there are some remarkably large tracts of this earth where they do not appear."

His solution is to use AT&T as principal services supplier worldwide, but to use the principal national operator in each country where 3M is engaged in business. "We use AT&T where we are able to, and elsewhere we select the best of local breed," he says.

"In the case of AT&T we have made significant progress because, through negotiation,

every 10 working days and exchange all the information on 3M's telecoms activities worldwide. The result is, they know about all the hot issues we are seeking solutions for."

3M has a number of advantages in dealing with the big telecoms suppliers. It has considerable in-house telecoms expertise with its own laboratories and skilled technicians.

And it has financial clout, spending some £150m a year on its telecoms infrastructure. Such organisations have little difficulty in getting the operators to concede volume discounts of between 10 and 40 per cent.

But as Mr Wollaston points out, 3M is not in the telecoms business: "It is absolutely crucial to the development and success of our business, but it is not a core product. We have 2,000 suppliers of telecoms products worldwide and that is a significant management challenge. We would like to reduce that number substantially."

It is likely, therefore, that 3M will outsource its telecoms activities? Not as such: Mr Wollaston draws a clear distinction between "outsourcing" where a company hands over

its entire telecoms infrastructure to a third party against an agreed level of service and "facilities management" which he defines as selecting areas which are outside company could manage effectively.

"We do not want to outsource control, direction or strategic decision-making. We want to retain the ability to select the technology of our choice and we would be cautious of getting locked into dependence on another supplier."

Mr Wollaston has four principal aims for the immediate future.

First, he is seeking integrated services digital network (ISDN) services in areas such as Asia Pacific, South America and Africa where the infrastructure is patchy. ISDN which many believe is the digital technology which will make possible the information superhighway.

He has little time for the conventional national demarcation lines: "All the operators are trying to protect their own turf while I am looking for transparency and interoperability. I want them to work together behind the scene to meet my business requirements. What you get is the old finger-pointing: That is not on my patch, not my responsibility," he says, with a touch of exasperation.

Fourth, he hopes to move conventional data communications to a faster, cheaper alternative called "frame relay" - a precursor to Asynchronous Transfer Mode (ATM) which many believe is the digital technology which will make possible the information superhighway.

Mr Wollaston, however, tells a story which speaks volumes about progress in telecoms.

"I remember that ISDN was the star of the trade show Telecom '79. The Italian telecoms authority said they would have ISDN lines through most of Italy by 1981. Now, 16 years later, we are still struggling to have ISDN in the Genoa region. If ATM takes as long to deliver, I shall be retired before we are using it."

Alan Cane



Wollaston: a perfect demonstration of 3M's commitment to leading edge telecommunications Picture: Ashley Ashwood

Interview: fast-growing new London operator Colt

## Further price cuts forecast for the City

Mr Paul Chisholm has just changed jobs within Colt (City of London Telecommunications), a provider of telecoms services primarily to businesses in the City of London. Now in charge of a planned European expansion, he was formerly the supplier's managing director and is also involved in the Other Licensed Operators Group - an organisation of 20 public telephone operators which has focused its discussions with British Telecommunications and the industry watchdog Ofcom on lowering barriers to market entry.

Although some businesses have been complaining that

pricing in the industry is too high, even though telecoms deregulation has been moving swiftly for some time, Mr Chisholm does not agree: "I guess I'd be taken aback a little if customers generally think prices are too high. People have probably unrealistic expectations of how much prices will fall with competition."

But he adds: "The benefits of competition have meant that prices have come down for most customers in the City and the main city regions of England. Switch calls, for example, have come down dramatically. Regional companies, such as Colt, Energis and

the cable companies have done that. International rates have also fallen. The traditional BT price to the US was something like 42p a minute. Mercury is about 38p. The going rate for companies in the City now is about 20p."

Mr Chisholm believes that businesses can look forward to further price-cutting activity and draws a parallel with the US: "Competition has been in place in the US for about 20 years. For 15 of those, prices came down. Only in the last few years have prices stabilised."

However, for companies outside the City of London, he is less hopeful. An organisation

based "where competition has not taken a foothold" - an example he gives is the east of England - might not be able to shop around for competitive telecoms rates.

He argues that competition has made BT cut its retail prices, but the wholesale charges between BT and Colt are a bone of contention. Without Ofcom, he says, "there's no reason for BT to move. In the wholesale market it has 96 per cent of the terminations [the destination of each call] in the UK. Customers complain up there were no standard contracts or standard pricing in the industry. That's been resolved. Negotiating interconnection agreements was difficult,"

So there is a need for a regulator: "BT is too strong but Ofcom's performance in general has been tremendous." He points to the work that has been done on simplifying contracts and pricing agreements between telecoms operators. In particular he is pleased with the negotiations that have taken place on interconnection charges - the price paid when calls are passed from one operator's network to another.

"When the Other Licensed Operators started up there were no standard contracts or standard pricing in the industry. That's been resolved. Negotiating interconnection agreements was difficult,"

time-consuming and expensive. But a new operator now has access to information, product, pricing and terms and conditions from which it can develop a business plan."

Mr Chisholm admits that there is still much more work to be done as regards competition and regulation. "There is no problem getting a licence but that does not mean there are no barriers to effective entry. There are many inherent benefits accrued to BT by virtue of its monopoly power. It is necessary to see the national network as a national asset open to all public telephone operators. These operators must become part of the

process in order to improve services and bring choice to customers."

In Colt's view, slowness to change impedes the chances of business customers being serviced exactly to requirements. But there is still plenty of

room for smaller suppliers to specialize in particular services as Colt's customers in more than 300 City of London buildings would probably testify.

Adrian Michaels



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## TELECOMMUNICATIONS IN BUSINESS 3

Christopher Price looks at the impact on BT and Mercury of new UK operators

## Drive for residential customers

Member of the European User's Association, the group used its committee's lobbying power to persuade AT&T and BT to agree to create the virtual network. He has little time for the new national network for the moment. "All the operators are trying to project their own image, while I am looking for the customer and interoperability, want them to work together before the scene in made up. You get the old finger-pointing. That is not on my part, it is my responsibility," says, with a touch of exasperation.

Fourth, he hopes to move conventional data communications to a faster, cheaper alternative called "frame relay". Transfer Mode (ATM) will, many believe, is the next technology, which will make possible the information superhighway.

Mr Williamson, however, feels that much progress is being made in frame relay, and reckons that ATM is the future. The future, however, says he would prefer ATM through most of the 1990s. Now, if anything, we are still stronger in ATM in the City of London. ATM takes a long time to be refined, I shall be retired by the time we are using it."

Alan Carr



Challenger: the Colt (City of London Telecommunications) network

telephone market. However, the growing inroads being made by both cable companies and other licensed operators into the business market is unlikely to go unnoticed, or unchecked.

Three of the most prominent challengers to the dominance of BT and Mercury, the first alternative telecoms operator to be licensed, include Colt, which operates in the City of London, Energis, owned by the National Grid, and MFS, the US telecoms group.

They have been focusing their drive for new business chiefly on residential customers and BT's decisive response earlier this month was also aimed at that part of the tele-

City of London. It has laid about 110km of cable at a cost of £30m and services some 350 buildings in the City.

The group, which is owned by US investment house Fidelity, turns over about £10m a year. It has recently applied to the UK government for a national operators' licence, although it is also eyeing other city areas, such as Manchester, Birmingham and also the M4 corridor.

Colt has signed a preferred supplier agreement with Energis, each company using its other's area strengths - Colt in the City and Energis for its long-distance network.

Energis arrived just under a year ago, using National Grid's pylons to carry its 3,500km fibre optic network, with an initial investment of £250m. Its stated aim was to target small and medium-sized business customers.

Launched in March this year, MFS's fibre network covers most of the City and Docklands and is being built out to Southwark and Westminster. The company is considering a plan to extend the network to the Thames Valley, putting MFS within reach of 35 per cent of the UK's big telecoms users.

The big selling point of all the new telecoms operators is price. Colt, for example, claims to be 15-20 per cent cheaper than BT. The issue is inevitably contentious, with BT at pains to point to the "hidden" costs carried by some operators. While admitting that its basic call costs are often higher than those of competitors, BT also likes to stress the experience, service and breadth of expertise the company has built up.

However, growing numbers of business users have been switching to the new operators, drawn by promises of cheaper rates, but also attracted by other considerations. For example, a move to Energis by life insurance group London and Manchester was technology-driven. The telecoms group was developing a call management information system in conjunction with a Toshiba telephone system used by L&M. The insurance group, which is headquartered in

Exeter but which has 40 field sites, was keen to gather more information about its telephone usage, which Energis was able to offer.

"The management information system we now have from Energis allows our local managers to be in control of their call costs and even monitors the quality of telephone service we give to our customers," said Mr John Willis, the group's telecoms manager.

He praised the attitude of Energis, particularly on its business emphasis. "Energis come from a different angle to deal with small and medium businesses. They seem to understand what our type of requirements are."

Price was also an important factor, admitted Mr Willis, although the company continued to keep its options open. "We also continue to use BT, Mercury, Energis and have just signed up with our local cable provider, Eurobell." He said that the group's suppliers would be reviewed periodically and the group would choose its provider on price and service. "The more suppliers, the stronger our position on price."

A similar system exists at Reuters, which uses the big two, along with Colt. The US-owned group was used initially on a project to provide a Synchronous Digital Hierarchy service - essentially a line back-up service - to the news and information group last year. Since then, Reuters has used the telecoms provider more extensively.

"They proved themselves in terms of price and service. They listened to what we wanted and went away and delivered," said Mr Kirk Langley, a marketing manager at Reuters.

Mr Langley said there was a perceived loyalty to the group's traditional telecoms suppliers. However, the situation was "application specific... if a new player comes on board we are very happy to try them out."

Similar criteria were sought by Mr Richard Lander, manager of multimedia services at Telerate, the financial information group. It has recently launched a screen-based infor-



Energis is installing a 3,500km fibre-optic network along the earth cable of the UK electricity industry's pylons

Colt control centre in London. Colt was awarded its first UK telecoms licence two years ago and has laid about 110km of cable at a cost of £30m

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## TELECOMMUNICATIONS IN BUSINESS 4

The Internet has now reached critical mass, reports Paul Taylor

## Revenues of \$10bn forecast

The Internet, once little more than a playground for computer hobbyists, has become an important business tool providing a global communications facility, marketing and research device and a channel for electronic commerce.

"The Internet is going to be a huge moneymaker," says a US-based Forrester Research group in a recent report. Forrester estimates that overall market revenues from Internet-related products and services will grow, "from a respectable \$300m last year to a \$10bn juggernaut by the end of the century."

Specifically, Forrester predicts that software for Internet applications will grow into an annual market worth more than \$750m by the end of the decade. Internet access fees will climb to over \$500m, new Internet activity will generate \$350m in new hardware sales and Internet-related services and consulting will reach \$225m.

SRI International, another market research firm, argued in a report published at the end of May that the Internet "can serve a critical role in allowing companies to establish and maintain relationships with their clients, which in turn allows them to become more responsive to clients and to promote sales of additional products and services."

The Internet has expanded rapidly in recent years. It now has about 40m users and connects more than 40,000 individual networks and almost 5m host computers with about a third of them in Europe.

A new network is connected to the Internet every 30 minutes and 1m new users join each month. By the year 2000, some industry participants are predicting 100m Internet users.

Almost half the US publicly-traded companies with annual sales over \$1.5bn have a presence on the Internet and new commercial sites are almost doubling each year, according to the Internet Society, an international organisation that oversees technology and applications of the Internet. About 60 per cent of Internet traffic is of commercial origin.

The recent surge of business interest in the Internet has been driven by several factors. These include the development of easy-to-use software for searching the Internet's vast information resources and the lure of low-cost global data communications.

Most importantly, however, the Internet has now reached "critical mass" - there are so many potential customers that businesses cannot afford to ignore it.

The most popular commercial uses of the Internet are internal and external electronic mail - used by up to 80 per cent of businesses - file transfer (50 per cent) and access to external data (40 per cent).

Over the past few years the Internet has become a conduit for millions of electronic messages. Unlike telephone calls, facsimiles or conventional mail, the cost of Internet electronic mail is independent of how far the message must travel, making it a big cost saver for international communications.

In the future, the Internet could also become an important medium for cut-price voice traffic as well as data. Although the use of the Internet for telephone calls currently suffers from a number of drawbacks Mr Peter Dawe, managing director of Pipex, the largest UK-based commercial Internet service provider, believes this will change rapidly.

Software packages which allow person-to-person voice calls over the Internet are already available and more sophisticated hardware and software packages are just around the corner.

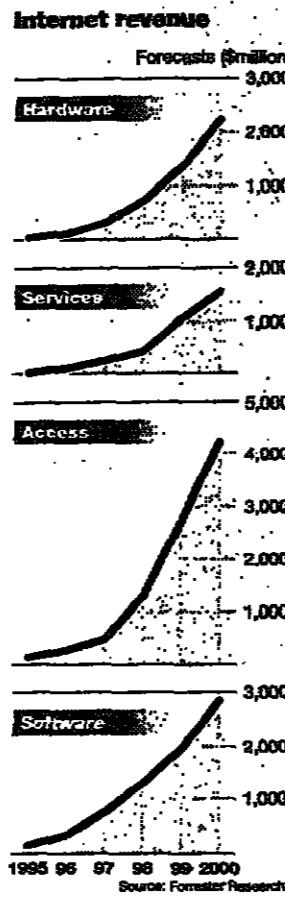
In the meantime, however, the fastest growing portion of the Internet is the "World Wide Web" (WWW), which provides a standard set of protocols for presenting and retrieving "pages" of information.

Traffic on the WWW increased more than 10-fold in 1994 and by early this year there were more than 15,000 World Wide Web "home pages" set up by individuals, academic institutions, companies, government departments and other organisations.

Many companies have established "electronic billboards" on the WWW to show off their wares, creating a flourishing "commercial district" on the Internet.

The WWW has almost single-handedly transformed the Internet from a members-only sandbox into a gigantic crossroads with strip malls, neonate info-publishers, and EDI depots," says the Forrester report.

WWW sites range from simple product lists to elaborate



security concerns, however this is now changing.

In Silicon Valley, for example, a consortium of high-tech companies is creating CommerceNet, an Internet marketplace for electronics products.

Using a secure browser program, customers can order products directly over the network using their credit cards.

Using the latest version of Netscape's WWW browser, secure shopping malls have been set up by US-based companies.

These include marketplaces, the Internet Shopping Network and Access Market Square run by Utah-based InterConnect West.

Meanwhile, Barclays Merchant Services launched BarclaySquare, an electronic shopping mall, last month.

BarclaySquare uses the encryption features of Netscape Navigator v1.1 coupled with proprietary security features developed by Interactive Telephony, a private Jersey-based company which operates Supernet, an embryonic on-line information service.

However not everyone agrees about the potential of the Internet for electronic shopping.

According to a recent Dataquest survey, fewer than 25 per cent of Internet users are willing to make an on-line credit card purchase.

Although the Dataquest survey confirmed that security was a primary concern - more than 60 per cent of the survey respondents considered security to be very important - security is only a small part of the lack of interest in on-line shopping today.

The key factors behind the growth of electronic shopping are developing compelling applications and producing scenarios that focus on the consumer rather than the merchant," said Allen Weiner, a principal analyst with Dataquest.

"Applications need to provide convenience as well as a pleasurable shopping experience to be successful with the consumer, simply providing a different way of doing the same old thing will not lead to success in this market."

Beyond marketing, communications and electronic publishing, the real promise of the Internet is electronic commerce - transactions conducted via computer networks.

The development of electronic shopping over the Internet has been held back by

The growth of the Internet is also fueling the development of a dynamic hardware, software and services industry to support the Internet itself.

Input, the market research firm, estimates that the Internet will drive the development of a software, support and services market in Europe alone worth \$350m in annual revenues by the end of the decade.

"The Internet phenomenon is the biggest information services story of the 1990s," says Mr Peter Cunningham, Input's president and founder.

In the US, for example, Sun Microsystems, the leading supplier of computers linked to the Internet, is also itself a

heavy user of Internet applications.

The computer company is using the WWW to reduce costs of employee and customer training, printing, software distribution and customer service. Sun claims to save about \$1m each quarter by distributing software patches and pre-release versions of new programs on the www.

Nevertheless for all of its advantages, the Internet has a number of drawbacks. In particular it lacks a comprehensive directory of users and services and has suffered from a number of highly-publicised security breaches.

Speaking in December at a UK forum on security and the Internet delegates were told "security practices which are

required for an internal network with a few thousand users simply do not guarantee secure links to an Internet community of 35m people," by Mr Gerry O'Neill, the National Computing Centre.

To combat the security problem, companies linking their computers to the Internet have built "firewalls" to protect sensitive internal information against intruders.

Business users can also look forward to improved services as new software and encryption technologies continue to transform the global computer network into a robust business tool.

**Sizing the Internet: Forrester Research**: (44) 0753 831534, by subscription only. **Internet Users: Who They Are, What They Want: Dataquest**: (44) 0194 422722, price £145. **Business Applications of the New Internet: SRI International**: price £1,000; (44) 0181 688 5555

Big company networks: Mark Newman on global operator alliances

## Caution over outsourcing

Are large businesses ready to hand over control of their telecommunications networks to public network operators? It is a question that has been consuming the minds of the international telecoms community since the first shots were fired in the global-telephone-operator-alliance wars four years ago.

Outsourcing provided the first step into the international networks market for BT in 1991. It was BT's aborted attempt to set up a joint venture with Deutsche Bundespost Telekom and Nippon of Japan which triggered off a scramble among European and US telephone companies to set up shopping today.

The key factors behind the growth of electronic shopping are developing compelling applications and producing scenarios that focus on the consumer rather than the merchant," said Allen Weiner, a principal analyst with Dataquest.

"Applications need to provide convenience as well as a pleasurable shopping experience to be successful with the consumer, simply providing a different way of doing the same old thing will not lead to success in this market."

But have users really benefited from the growing attention that they are supposedly receiving from telephone companies? And are the operators managing to convince them that telecoms is not a core business, and that they should move into the passenger seat while a specialist telephone company takes over at the wheel?

A reasonable answer would probably be no, not yet. A large number of multinational corporations are outsourcing parts of their networks. But very few are outsourcing their entire networks.

Users are enthusiastic about the concept of outsourcing, but cautious to commit themselves. There are a number of reasons why.

There is continued uncertainty over the long-term stability of global alliances and partnerships. The alliance between France Telecom, Deutsche Bundespost Telekom and Sprint, a US telephone company, is still awaiting clearance from both Brussels and Washington. Unless Germany, and particularly France, move quickly to open their domestic

markets, it is difficult to see how it will win US approval. Without regulatory clearance, what future can there be for such an alliance?

There are similar doubts concerning the alliance between AT&T and Unisource, the group owned by ITT Telecom Netherlands, Telia of Sweden, Swiss PTT Telecom and Spain's Telefonica.

This uncertainty makes telecoms managers nervous about committing themselves to single-supplier relationships.

On the other hand, suppliers are reluctant to offer short contracts. In many cases they can only justify the cost of building a network to meet the needs of

handful of access points in a single country.

Users also face a dilemma in deciding between short contracts of one to two years, or longer, five-year contracts.

The introduction of new technology and the advent of competition are driving down the price of international telecommunications services. What looks like a fair price today may be over the odds in two to three years' time.

Do companies risk losing a particular customer on the basis that they will be guaranteed several years of revenues. It can also be expensive for the user to switch outsource after only two to three years.

Are global carriers global? In most cases, no. The three key alliances - Concert, Unisource and AT&T, and the alliance of France Telecom, Deutsche Telekom and Sprint - all have a bias towards the US and Europe. Can you really expect multinationals with operations in Asia to had over control of their networks in the region to a US or European-based venture?

Chase Manhattan, the US bank, is working with a separate supplier in each part of the world because it is not convinced that global alliances can co-operate properly. Its supplier in Asia is Hongkong Telecom, the Cable & Wireless subsidiary, which hubs traffic from its various subsidiaries in the region.

Who takes the lead? If a large user signs up with AT&T-Unisource, which alliance

Outsourcers may only have a

only one to have received regulatory approval from both sides of the Atlantic. BT owns a 20 per cent stake in MCI, so there is little prospect of the partnership unravelling.

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## Case study: Barclays Network Services

## Beware the Tower of Babel

As network director for Barclays Network Services, Mr Keith Bellamy oversees one of the largest private data networks in the country.

The network, running on lines mostly leased from British Telecom, has been established for eight years and has had at least two large revisions in that time. It connects all Barclays branches and supports all the bank's UK transactions - some 4bn last year. And it is growing very fast.

Data traffic carried on the network grew 60 per cent in 1993-94 and Mr Bellamy expects traffic to double this year. The number of terminals has risen from 30,000 about 18 months ago to 80,000 now. Meanwhile the system has at least one new piece of software added to it every week.

Says Mr Bellamy: "We've got one of every network you could come across. The reality is that networking came from the dungeon of the ivory tower. In the late 20th century we made the same mistakes as the Tower of Babel - almost literally when you consider we have over a dozen message systems."

He estimates the system will need £6bn-7.7bn spent on it over the next few years. "As technology changes we are getting diminishing returns from investment. We are not a telecoms company even though we have to act like one. And even though I am far from convinced that any external providers can deliver the service we need, we should not be running our network."

This is a hard-headed statement rooted in business sense, according to Mr Bellamy. "My gut feeling, which is not based on much research as yet, is that the costs are going to be

355 suppliers. On the data network side, we've now got that down to less than 30 but we are having to look very hard at the question of managing suppliers. Too often we don't talk a common language with them."

But things are improving. He cites an exercise undertaken by Hewlett Packard and BEW where the two joined forces to identify needs. Mr Bellamy says that other suppliers, such as International Business Machines, are signing more comprehensive partnership agreements.

The emphasis is firmly fixed on partnership. "Five years ago we offered BT our network and they refused. They have changed since then and probably could do it now but often talk with large telecoms companies when our needs are fully understood. We are going to have to work fully together with whoever our partners are." "Eight years ago, no one else

people are going to be sorely disappointed."

"It's a morale issue as technology becomes obsolete. We have many people employed in the telecoms area of the company and they see their skills going out of date. We would need a full technology infrastructure in the company to deal with that."

There are other reasons why Mr Bellamy believes the time is right to hand over the operation. "Three years ago, I listened to someone relate with pride that we had as many as

22 sites in the UK and about 2,000 users."

Mr Keen believes that the main reason for running the networks on private lines is cost. "It's a straight rationale. Every six months or so we review costs and tariffs. We've seen increasingly negotiable rental charges and some suppliers are now offering free installation."

His colleague, Mr John Dawson, telecoms consultant, sees an extra advantage. "In some ways you take on more trauma when you manage your own network but you're not reliant on other contractors."

Also part of the team are two full-time engineers whose jobs are to solve day-to-day problems and adjust the system to facilitate staff movements. Mr Dawson says it takes just four to six weeks to add another site to the network, and this includes calculating all the costs involved with using different suppliers and lines as well as installation.

Virgin Atlantic has learned from experience not to rely too much on one supplier, in case services are not delivered on time. To that end, the industry's deregulation is perceived as an advantage. Mr Keen's team has more suppliers to choose from and takes full advantage of price competition. A number of deals have been struck with some of the newest entrants, including cable companies.

The scale and complexity of Barclays' operation dictates a different set of needs to those of Virgin Atlantic. But aspiring network managers, currently engaged in constructing their own, smaller, Towers of Babel, have been warned.

The voice network connects

Adrian Michaels

Case study: CTI at Domestic Database has a valuable opportunity to offer a range of services to the business community. The company has a strong track record in providing high-quality, reliable and cost-effective services. CTI's expertise in the field of data processing and management makes it well positioned to offer a wide range of services to the business community. The company has a strong track record in providing high-quality, reliable and cost-effective services. CTI's expertise in the field of data processing and management makes it well positioned to offer a wide range of services to the business community.

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Case study: CTI at Domestic Database has a valuable opportunity

Claire Gooding examines Computer Telephony Integration

## A two-way long-term relationship

The computer and the telephone can be tied together in various ways - the casual dialogue via modem; the distant, more frustrating encounter with a voice-messaging system that invites the caller to use the touch-tone keypad to divert elsewhere.

Computer Telephony Integration (CTI) is often described as a "true marriage" between computing and telecommunications. It is certainly a two-way long-term relationship, driven by the realisation that the telephone, not the home computer or the television, is the most universal, well-understood and easily available way of delivering information.

"Increasingly in the UK and Europe, people are much more prepared, and indeed willing to do business over the telephone rather than writing to their insurance company or queuing to do business in the bank," says Stuart Bowden, business development director at CTI systems specialist Envoy, and chairman of Actius, the Association of Computer Telephone Integration Users and Suppliers.

"Because of this, companies are having to ensure that the service they give is of the highest quality," says Mr Bowden, citing British Air-



Bowden: 'People are much more prepared to do business over the phone'

operator with information that will help the operator to respond appropriately. Once the caller has given his or her name and other information (often the postcode), the agent can bring up the relevant information from the computer, a process known as "screen popping".

The database is the main difference between CTI and the older call-routing ACD (Automatic Call Distribution) systems, in use for 30 or more years by organisations to manage high volumes of incoming calls. The most sophisticated CTI systems not only route the calls, but like BA's Rapport, use Calling Line Identification to "read" the incoming call and deliver both call and the appropriate database record to the screen without human intervention.

Whether the screen record is delivered automatically or is summoned by the operator, it is the preamble to an exchange in which the caller volunteers or requests information from a live operator or "agent", whose job is to interpret and relay verbally what he or she sees on the screen.

Interactive Voice Response cuts out the human, and allows the caller to talk directly to the database. IVR is often PC-based or connected and is most commonly used to deliver or accept information without human intervention, such as placing an order or delivering account-balance information.

Both voice and touch-tone input are supported by voice systems integrators such as US-owned Syntellect, UK company Vocalis, based in Cambridge, and AxSys (owned by the National Bank of Kuwait, NBK, and based in Jersey with a research arm in the Philippines).

Financial institutions are enthusiastic about the cost-efficiency of IVR. TSB's Speedlink offered an IVR system in the 1980s; now its TSB PhoneBank uses CTI and IVR techniques from Envoy Systems of Richmond, mixing the two so that customers get the best of both worlds. NBK does the same with its Watani (national) Phone Bank, similar to Midland's First Direct telephone banking service in the UK, and

of ATMs (Automatic Teller Machines). Users call a single number, and are switched through to the appropriate telephone banking service.

The service cuts the cost of delivery. "If you can take the transaction out of the branch and put it on an ATM, you cut the cost of that transaction by 90 per cent," says Richard Stutely, director and executive vice-president of AxSys.

"If again you take it off the ATM and put it onto a telephone banking system, it is generally agreed in the banking industry that you cut the costs again by a further 90 per cent."

Other innovative users include Skandia Bank, a Syntellect customer which has a single high-street branch in Stockholm, but offers instead a free IVR service. Its low costs and fixed charges for ATM and other transactions enable it to offer an interest rate 4 percentage points higher than rival savings accounts, and this has proved an incentive for customers to manage their money interactively on a daily basis.

Another Syntellect customer, South West Electricity, has saved hours of frustration and massive administrative costs by allowing users to enter their own meter readings into an

IVR system. "The technology is not new," says Mr Bowden, "but there's also a better understanding of how to build a business case for the investment, with quantifiable business benefits. Companies are now looking for more sophisticated ways to use CTI to differentiate themselves in the marketplace."

He believes the UK is far ahead of most of Europe in implementing CTI and more or less on a par with the US in terms of market penetration per head of population.

"The market is just waking up to the potential, and it's now taking off across Europe in Spain, Germany, and Scandinavia. The very fact that Novell and Microsoft have started to take an interest has also helped the market."

The Asia Pacific markets also provide about 20 per cent turnover for Octel, which claims to be the largest supplier in the world of voice-messaging systems, with 35 per cent of the voice-processing market, ahead of AT&T, Northern Telecom and Rolm. Octel supplies voice-messaging systems to Microsoft, the world's largest software house, and is working on an integrated voice-messaging and e-mail system to run under



British Airways recently won the Actius Integrated Call Centre Award

Photo: Tom Andrews

Microsoft's Exchange client-server e-mail systems.

Octel took over the strategic alliance that its competitor VMX had already established with Microsoft when it acquired VMX in January 1994. Development work in Octel's client-server development section, based in London, started in October 1993, with Microsoft engineers.

"What we've worked on is the integration of voice-mail with e-mail," says Mr Hyde-Thomson. "The telephone handset is the point of delivery. What's new for us is that

we're now integrating with the world's largest software house, Microsoft, on its Exchange client-server e-mail system. Our customers will be able to use the new Geneva technology as an add-on component to existing systems."

References:  
Actius - Tel 01372 361000 - also publishes an excellent guide to CTI terminology: contact Roy Bailey.

Ovum: *Computer Telephone Integration: the business opportunity* published January 1995. Tel: 071 255 2670

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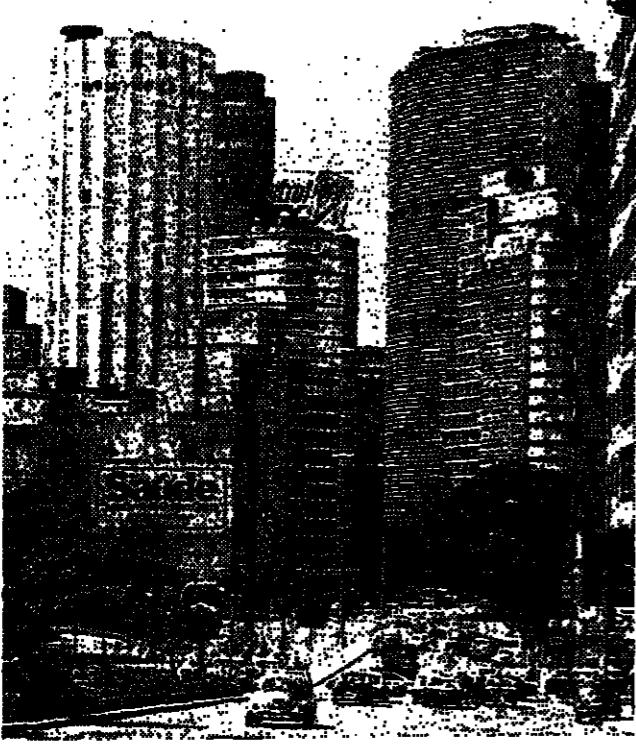
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## TELECOMMUNICATIONS IN BUSINESS 6



São Paulo: cellular phones were only introduced in 1983

By Michiyo Nakamoto  
in Tokyo

Last month, NTT, Japan's domestic telecommunications carrier, encountered the wrath of one of its customers in the form of a petition filed to the country's competition authority.

Bloomberg, the business news agency, complained to the Fair Trade Commission that NTT's decision to raise the price of using local digital leased phone lines by as much as 83 per cent, while at the same time significantly reducing the price of long-distance lines, constituted an unfair competitive practice.

The company also criticised NTT's decision to raise digital line prices while maintaining the prices of analogue lines, which are used by an NTT subsidiary and a competitor to Bloomberg in providing information and systems to the investment community.

The price of digital phone lines in most parts of the world was cheaper than in Japan, which was the only country where prices were going up rather than down, the company said. How could NTT "claim to be at the forefront of the multimedia industry and at the same time almost double the price of digital phone lines?" Bloomberg asked.

The complaint by Bloomberg sums up the view of many business and individual users of telecommunications services in Japan. To many users, Japanese telecoms services are both

too expensive and slow to come to market.

According to Bloomberg, a local 64-kilobyte digital phone line leased from NTT and covering an area within 15km, costs ¥42,000 a month, or almost four times a similar line leased from Metropolitan Fiber Systems in New York, which costs \$140 - or ¥11,800 at current exchange rates of ¥85 to the dollar. NTT's plan to increase the price will widen the gap even further.

NTT points out that its decision to raise some local digital line prices and reduce long-distance prices stems from a need to rebalance its rates in order to ensure that its loss-making local operations become profitable. The new local leased line rates better reflect the actual cost of providing the service.

However, the argument serves to raise questions about NTT's cost structure. Bloomberg is not the only company that points out the high cost of NTT's leased lines. AT&T International, a US information agency, has also complained about NTT's plan to increase prices.

The rates for domestic leased lines covering 100km to 300km and at speeds of 1.52 megabytes a second cost twice the

international average and eight to 10 times more than the standard rates in the US, according to a report by Morgan Stanley in Tokyo.

Meanwhile, NTT raised its basic rate charge to all phone users in February this year, pushing it to about twice the basic rate charged in the UK and France.

If the cost to NTT of providing its services calls for rates that are much higher than the

those charged by AT&T while those between Japan and the UK are 54 per cent higher than the rates charged by BT, according to a study by the Management and Co-ordination Agency.

The study compared the cost of making a three-minute phone call during afternoon hours on weekdays.

While overall Japanese prices are in general much higher than those in other industrialised countries, much

the delay in introducing new services lies in a lack of competition. Liberalisation of the telecoms market in 1985, which opened up the domestic market to three new long-distance carriers, resulted in significant competition in the long-distance market. But

"there is still not enough competition in the local market," points out Mr Norio Nakamura, senior assistant director of the Industry and Telecommunications Department at Keidanren, the business organisation.

Without effective competition in the local market, NTT has little incentive to cut costs so that it can reduce rates. Neither will it have much incentive to speed up modernisation of its local network or to bring new services to the market.

Japanese business leaders are convinced that with the maturing of manufacturing industries, telecommunications will be an important engine of the Japanese economy in the 21st century.

But for the development of multimedia and other new telecoms business, which are expected to support future growth, "telecommunications rates have to be low and services have to be widely available," Mr Nakamura says.

"NTT needs to voluntarily formulate a rationalisation programme," the Agency states, while KDD also needs to cut employees further it says.

## International perspectives: Japan

## High rates and slow progress

## NTT and KDD have both been carrying out extensive cost-cutting measures

international average, it is reasonable to assume that the level of NTT's own costs are partly to blame.

At the same time, KDD, Japan's leading international telecoms carrier, maintains international call rates that are significantly higher than those seen in other leading economies.

In spite of fierce competition with the new common carriers in the international call market, and an equally intense marketing campaign by the company which draws attention to its lower prices, KDD's rates between Japan and the US are 11 per cent higher than

of the blame for NTT and KDD's high costs lies in their own lack of efforts to rationalise their operations, the Agency points out in a report published early this month.

NTT and KDD have both been carrying out extensive cost-cutting measures. But the Management and Co-ordination Agency notes that the proportion of personnel costs over total costs is the highest at NTT, at 38 per cent, followed by KDD, at 25 per cent.

"NTT needs to voluntarily formulate a rationalisation programme," the Agency states, while KDD also needs to cut employees further it says.

## International perspectives:

Brazil

## Business users rue the day

By Angus Foster  
in São Paulo

Ask a business user in Brazil about the country's telecommunications services, and the reply is likely to begin with a well-chosen swear word.

There are two main complaints. Business rates are extremely expensive, thanks to cross-subsidies for residential users. And services are extremely limited because the government and its telecommunications monopoly Telebrás have lacked the finance to invest or the competition to lift performance.

The result is that although Brazil has the world's 11th-largest telecommunications network as measured by terminals, much of the system and services available have hardly been modernised since they were installed in the past two decades.

Underinvestment by Telebrás since the early 1980s, mainly due to Brazil's overall economic crisis, has left the country with only about seven terminals for every 100 inhabitants: one of the lowest figures in Latin America. Call failure rates are up to five times higher than in Europe or the US. The waiting list for a new phone in São Paulo, the most important industrial state, is two years.

Business users face special problems. Most exchanges are still pulse rather than tone, limiting the business uses of telephones and leaving executives distraught when they encounter tone-operated voice-response units (VRUs) overseas. Only a third of exchanges are digitalised and fibre optic cables are only now being laid on long-distance routes, leaving much of the system with poor-quality lines.

Those business services which are available, mainly provided by Embratel, Telebrás' long-distance arm, are limited to basics such as packet switching and dedicated lines. A wide range of services, from advanced data transmission such as frame relay to simple conference calls, are not available. One company uses its US head office to set up conference calls in Brazil. Although far from ideal, the mechanism is also cheaper since calling from Brazil to the US costs \$1.80 a minute: more than twice the cost of a US-Brazil connection.

Modernising Brazil's telecommunications will take time, but a start does finally appear to have been made. Congress last month started discussing an amendment to the constitution which would break Telebrás monopoly and allow private sector competition in telecommunications. The proposal, which needs approval in four separate votes, has so far been well received and could become law later this month.

"It's a good sign and shows we are on the right track. But many of the details are still to be resolved," says Mr Carlos de Paiva Lopes, chairman of equipment supplier Ericsson in Brazil.

Mr Sérgio Motta, communications minister, believes that the state alone does not have the resources to invest the \$30bn-\$35bn which will be needed to upgrade Brazil's telecommunications until the end of the century. With plans to nearly double the number of installed terminals to 23m by 1999, the private sector will increasingly be needed to invest in areas such as cellular networks.

Even low-orbit satellite com-

munications systems are being studied.

He foresees a three-step restructuring of the sector to increase competition if the amendment is passed. The first, which he believes could take effect almost immediately, would open higher value-added telecommunications services such as cellular networks and data transmission to private competition.

Second, a new regulatory and pricing structure needs to be set up, probably by absorbing those parts of Telebrás and the communications ministry which have regulatory functions. Finally, Telebrás' operating arms in the 27 states would be merged into six to eight larger companies in preparation for competition in basic telephony and eventual sale to the private sector.

With so much to do, and with the legal and regulatory framework still lacking, progress could be slow. "Considering the size and complexity of Brazil and the market, it is better to get the regulations right rather than rush them," says Mr Francisco Loureiro, general manager of the Brazil office of US carrier Sprint. Opening higher value-added services to private competition would be a significant first step, especially because cellular phones serve as a symbol for much of what is wrong with the state monopoly.

Cellular phones were only introduced in São Paulo in 1983 and there are now between 1m and 2m people on waiting lists for terminals in Brazil. The rush for lines, partly fanned by the waiting list for conventional telephones, has already congested Band A frequencies in São Paulo while Band B remains off-limits to private competition until the constitution is amended.

Mr de Paiva Lopes of Ericsson estimates that the market for cellular telephones could reach 5m terminals, suggesting Brazil could be one of the fast-growing world markets and extremely attractive to private investment. Value-added services such as data transmission would also be interesting for companies such as Sprint. "What is available in Brazil today is extremely restricted," says Mr Loureiro.

One complicating factor which needs to be resolved before the private sector will invest to start providing these services is the pricing regime. This has been used to subsidise residential users, especially in less developed regions, to the disadvantage of businesses and overseas callers. Telephone charges have also frequently been kept down by governments looking for politically harmless measures against inflation.

The monthly standing charge for a residential user is \$0.70 while a one-minute local call costs about \$0.02. Embratel's international rates, among the highest in the world's major economies, have been subverted by an increasing number of call-back services on offer from mainly US companies. But structural changes to the pricing regime remain unlikely in the short term because they would add to officially measured inflation, the government's number one enemy since a new currency was launched last year.

Given these problems, and the likely delays working out a new legal structure, business users are likely to be swearing for some time yet before the potential of Brazil's telecommunications market comes into view.

LOOK, THAT'S WHERE DADDY LIVES

## TELECOMMUNICATIONS IN BUSINESS 7

## International perspectives: Italy

By Andrew Hill  
in Milan

the delay in introducing services lies in a lack of

Liberalisation of the

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It is probably no exaggeration to say that the Italian telecommunications sector has seen more changes in the past year than in the previous decade.

This year alone has seen the formation of a series of new telecommunications alliances aimed at the business market.

And within the last year, even the state-controlled sector has undergone a metamorphosis – evolving from a complex collection of linked operating companies, some quoted and some wholly owned by the state, into its established business.

The latest alliances, aimed initially at the business client, include Infostada, a joint venture between Olivetti, the computer group; Bell Atlantic, the US telecoms company; and Albatom, which links BT's expertise with the existing communications infrastructure set up by Banca Nazionale del Lavoro (BNL), one of Italy's biggest banks.

Nevertheless, Telecom Italia remains the company to beat in Italy. As an illustration of its importance domestically, both the Italian group and its foreign competitors still assess the potential size of the business market with reference to the state-controlled company's turnover.

Mr Di Genova estimates that in the business sector, some 12,000bn of annual turnover is

already deregulated, and perhaps 15,000bn will be open to competition by 1998.

For example, Telecom Italia

won an important contract to

manage the telecoms needs of

Pirelli, the tyre and cable manufacturer, which, under its

until recently had an unenviable reputation for inefficiency.

While Telecom Italia has

restructured and modernised,

rival ventures, including British Telecommunications, Cable & Wireless, AT&T and the Uni-

source alliance, have begun to

make inroads into its estab-

lished business.

The overall structure is still

relatively complicated. For

example, a majority of Telecom Italia's shares are still owned

by Stet, the state-controlled

telecoms holding company

which could be privatised later

this year. But for the business client, who used to have to

deal with different operating

companies for domestic, Euro-

pean and intercontinental

calls, the Telecom Italia

merger has greatly simplified

business.

It has also, according to Telecom Italia, made it easier for the state-controlled company to attract business. "Up to a few years ago, ahead of the restructuring, we had difficulty competing," claims Mr Girolo Di Genova, responsible for business clients at Telecom Italia. The change of name has also distanced the phone company from Sip, its predecessor, the domestic operator, which

is not resting on its laurels, and competitors are not reducing the pressure on the market leader.

The past year, for example,

has seen an acceleration in the number of companies preparing to outsource telecoms services.

Telecom Italia points out

that whereas it won only 15

large contracts for outsourcing

in 1993, it had 35 in 1994 and

has already agreed 40 in 1995.

For example, Telecom Italia

won an important contract to

manage the telecoms needs of

Pirelli, the tyre and cable manufacturer, which, under its

anti-trust authority for failing to allow

managing director Mr Marco Tronchetti Provera, has been

placing increasing emphasis on

internal communications,

including the use of video-con-

ferencing and other advanced

techniques.

Olivetti recently decided to

reverse its decision to sell a

data processing subsidiary

because of the potential for

outsourcing of data processing

and telecoms services.

Foreign companies have

tended to concentrate until

recently on winning international business.

For example, by bidding aggressively against

Telecom Italia and other interna-

tional groups, Cable & Wireless,

the British telecoms group,

won a contract in

March to handle the interna-

tional telecoms needs of Sham,

the gas company which is part

of Eul, the state-owned energy

and chemical group.

On the domestic market,

competitors have been hin-

dered partly by Italy's slug-

gishness to implement Euro-

pean Union directives on the

liberalisation of specialised

telecoms services, and Telecom

Italia's desire to prevent a

free-for-all in its own market.

Mr Stefano Borghi, the new

chairman of Cable & Wireless

Italy, believes that in the

medium term there is some-

Telsystem, a small Milan-based

company, to lease lines from

the national operator to offer

business services, such as

so-called "virtual" telecoms

networks linking a company's

offices. Mention of the Telsys-

tem case still irritates Telecom

Italia executives, who accuse

the small company of simply

taking advantage of the state-

controlled company's rigid tar-

iffs.

But larger competitors have

also taken advantage of the

rules to step up their market-

ing of services within Italy. Mr

Michael Yates, marketing man-

ager for BT's Italian operation

says: "We can now offer all the

data services, nationally and

using the Concert alliance with

MCI [the US telecoms group].

BT's agreement with BNL

also gives the company the

chance to use a domestic net-

work with more than 100 nodes

in Italy, compared with the 18

to which BT had access before.

"We had two possibilities if we

wanted to offer domestic ser-

vices: either to install other

nodes throughout the country

or buy the network from some-

one else," says Mr Yates.

Mr Stefano Borghi, the new

chairman of Cable & Wireless

Italy, believes that

domestic competition allows

the company to become an

international player," he says.



This year has seen the formation of a series of new alliances aimed at the business market. Picture: Sean Murphy

## International perspectives:

Germany

## Monopoly comes under fire

By Michael Lindemann  
in Bonn

thing for all participants in the Italian telecoms market. Cable & Wireless already claims some 3,000 customers in Italy, including subscribers to the company's popular "Surefax" managed facsimile service and other added-value services.

Cable & Wireless' hopes,

like those of all Telecom Italia's competitors, are pinned on the possible liberalisation of

infrastructure, and the chance

to exploit new opportunities in

the domestic market. In the

## TELECOMMUNICATIONS IN BUSINESS 8

## US developments: deregulation

## Change seems inevitable

By Tony Jackson  
in New York

For US business users of telecoms, one of the most far-reaching items on the agenda is deregulation. With separate bills for telecoms reform under consideration by Congress and the Senate, change seems inevitable. The question is how business users will benefit and that depends above all on the legislative detail.

The basic premise is that the present regulatory framework in the US has created a network of local and functional monopolies. In turn, these give rise to monopoly rents. It follows that if the system is made genuinely competitive, the customer stands to gain on price.

By the same token, producers stand to lose. As a result, says an executive from one big US corporate customer, the initial motive for deregulation risks being distorted. "The whole thing that drove this", he says, "was the need to create an infrastructure. But the practical politics are being totally driven by companies trying to re-position themselves in a radically changing world."

A clear example of this is the debate over allowing local and long-distance telephone companies to compete in each other's markets. Since the break-up of AT&T a decade ago, this has been forbidden on competition grounds. In principle, both the House and Senate bills are now working to change this. The crucial question is one of timing.

Mr Tim Regan, of the US multinational Corning (a big telecoms user, but also a leading supplier of fibre optics to the industry) says that if long-distance companies are allowed to provide local telephone services but not vice versa, the results could be devastating.

What then happens, he says, is that the local company – one of the hugely powerful Baby Bells, such as Nynex or US West – sets itself up as a least-cost provider of routing schemes for long-distance calls. "Then the company tells me, as a customer, that it will collect services from all the 25 or so long-distance providers for the community, and will provide the cheapest solution. Then AT&T and the other long-distance companies will become

wholesale providers of a commodity, and the local company becomes the monopoly retailer."

The result, he makes clear, would be very bad news for the customer. "If [deregulation] is done right, the customer squeezes all the rents out of the system. If it's done poorly, and local phone companies get into these other areas before the monopoly is broken, it's a disaster."

The point is reinforced by Mr Michael Brown, vice-president for federal legislation at AT&T. It all comes down, he says, to doing things in the proper sequence. "There are three ideas here: monopoly, competition and deregulation. The first step has to be to end the existing monopolies. If you move to deregulation before tackling the monopolies, you may not get

**For business customers, the challenge is different to move from a world of monopolies to developing the ability to choose between suppliers**

competition." So far, there seems general agreement that both the House and Senate bills are aware of this threat, and that the result should be genuine competition between local and long-distance suppliers in each other's markets. At the same time, there will be relaxation of the rules which bar telephone companies out of the cable TV market, and vice versa.

The promised explosion of choice will then confront the industry and its customers with a central question: whether to take services, from voice and video to computer data and components, from a one-stop shop provider or from niche providers of specialised services.

It seems clear that all the big phone companies, at least, will push the one-stop option as hard as they can. Mr Michael McDonough, president of business markets at the local telecoms giant GTE, says: "We and the other larger suppliers will compete on a package basis – voice, video and wireless – against the smaller niche suppliers. There will be winners and losers, depending on which particular areas of the customer base they choose to compete in."

As for the industry giants, he suggests, the key to success in package solutions will lie in technical expertise rather than price. "Many of us will have similar strategies, and it comes down to execution – especially speed – with cheapness less of an issue."

For business customers, the challenge is different to move from a world of monopolies to developing the ability to choose between suppliers. As Mr McDonough points out, for many US business customers the arrival of specialist competing phone companies such as MFS Communications means the local monopoly no longer exists. All the same, he says, "the challenge for business customers is how to manage across multiple suppliers."

From the customer's viewpoint, there is one other central issue to be determined in the deregulation debate. At present, telephone and cable TV companies are largely barred from each other's markets. The convergence of technology means they are starting to invest heavily in duplicating each other's functions.

In an unregulated market, this duplicated effort would be promptly stopped by the process of merger between telephone and cable companies. The Senate and House bills differ on how far this should be allowed: the Senate would permit it on a local level, Congress only within communities of under 35,000 population – less than 15 per cent of the US population.

Mr Brown of AT&T sees real competition between cable and phone companies starting to appear within the next year. "You'll see the cable companies offering the first real true interactive networks, including voice, and the phone companies offering video". But he is not unduly worried about the threat from merger. "Both the Justice Department and the FCC (Federal Communications Commission) would look at any merger under existing laws, and they're not being over-ridden by either of the bills."

Nevertheless, the threat remains that monopoly will re-emerge under another guise. As Mr Regan of Corning puts it, "this gets to the core of what the deregulation bills are about. Are we building an infrastructure, or are we reshuffling the same deck of cards?"

By Louise Kehoe  
in San Francisco

The US cellular telephone industry reached an historic milestone earlier this year when it tallied a total of 25m customers. One out of every 10 Americans now has a cellular phone. The industry's customer base has more than doubled in the past two years, with new customers signing up at a rate of 28,000 a day.

The industry posted record gains in revenues, capital investment, new jobs, and cell sites last year, according to the Cellular Telecommunications Industry Association (CTIA), a trade group representing cellular telephone companies.

US cellular revenues for 1994 exceeded \$14bn, an increase of 30 per cent over \$10.5bn in 1993. While revenues rose sharply, cellular service prices continued to decline. The average monthly customer bill dropped to \$56.21, compared to the 1993 average of \$61.43 a month.

The industry invested a record \$2.5bn in new equipment and infrastructure during the last six months of 1994. In 1994, the number of new cell sites, the basic building blocks of a cellular system, increased by more than 5,500 – a 40 per cent increase – to a total of 17,920.

As the industry data demonstrate, the cellular telephone has moved beyond the business market to become a mass market consumer product in the US. It remains, nonetheless, a critical business tool. What is more, enhancements in wireless communications ranging from cellular data communications to personal communications services promise continued expansion of business applications.

Several US cellular telephone service companies have augmented basic telephony with integrated wireless services such as data access, faxing and paging. Cellular phone companies also offer services such as voice mail, information services, and even roadside assistance for motorists.

The US cellular industry faces new challenges, however, with the development of digital cellular technologies and the anticipated launch of new "personal communications services" (PCS) also known in the UK as personal communications net-

## Cellular telephones

works. The high penetration of analog cellular services in the US has created a market barrier to the introduction of digital cellular and PCS. By the time PCS is launched in the US, in about a year's time, cellular penetration will exceed 13 per cent of the population, according to Herschel Shosteck Associates, a market research firm.

In contrast, when PCS networks were introduced in the UK and Germany, cellular penetration was less than 3.5 per cent of population.

The prospects for digital cellular and PCS in the US market are further complicated by the lack of agreed standards for either. The options include several variants of Time Division Multiple Access (TDMA), Code Division Multiple Access

Ameritech announced last year that it would adopt CDMA technology for new services in Chicago and Detroit

(CDMA) and Global System Mobile (GSM) a European standard based on TDMA.

Over the next five years the North American wireless telephone market will be using the digital service at the beginning of this year and the number is expected to grow to about 1m by the end of the year.

However, when it comes to PCS, AT&T will support whichever PCS standards our customers demand, but we believe strongly that North American standards – like CDMA or TDMA – are better suited to the North American market than are European standards, because of their overall compatibility with the North American network – particularly in terms of interconnection to existing cellular networks and the rest of the Public Switched Telephone Network," said Jim Brewton, president of AT&T Network Wireless Systems, which supplies equipment to telecommunications companies.

For wireless communications users – whether they be businesses or consumers – the standards debate creates uncertainty that is likely to bolster the status quo and delay the adoption of new technologies. The US analog cellular market is thus expected to continue its rapid growth for at least another 12 months.

AT&T, the largest US cellular telephone service provider since its acquisition of McCaw Cellular, is already using TDMA technology. More than 250,000 subscribers were using the digital service at the beginning of this year and the number is expected to grow to about 1m by the end of the year.

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## Wireless communications

## Firing imaginations

By Geoff Wheelwright

Wireless communication appears to be all the rage in the US at the moment – with paging companies, computer manufacturers and service providers all rushing to cash in on it.

"Our expertise and focus is in the US (right now)," says Mr Weber. "Using PersonalLink, wireline and wireless capabilities are fully integrated. Wireline and wireline communications are normally separate, but with our service and the user interfaces being deployed on these devices (such as the Magic Link and the Envoy), they are seamlessly integrated."

As part of this awareness, it seems both business customers and consumers are becoming familiar with terms such as "intelligent messaging" and "intelligent assistants". The latter are essentially mobile software programs that go to places in the electronic community and carry out their owners' instructions.

AT&T's catalogue of PersonalLink Services bills itself as "the first commercial service that enables its subscribers to employ intelligent messaging with the help of intelligent assistants".

For example, subscribers can send electronic mail to one another using only their names to address the messages. They can automatically forward messages from particular people to someone else's computer or paging device, or have copies of messages about specific subjects made and sent to colleagues.

In the future, intelligent assistants will be able to perform even more complex tasks, such as notifying subscribers of changes in stock prices, searching publications and data bases for information of particular interest to the subscriber, or making travel reservations.

AT&T says that today's messaging networks are essentially message-switching operations "with limited flexibility for tailoring applications to particular needs". In contrast, AT&T says its PersonalLink Services is operated as a message processing network.

Users can send "smart messages", incorporating intelligent assistant software that interacts with intelligence in the network to perform operations that otherwise would require timely human intervention and constant attention.

PersonalLink is used by both of the most highly-publicised hardware releases of the past year – the Sony Magic Link and the Motorola Envoy – and was at the heart of Panasonic's announcement of its personal communicator at the Consumer Electronics Show (CES) in January.

According to Bill Weber, the PersonalLink Services wireless program manager at AT&T in the US, Americans may soon

be joined by Canadians and Europeans as users of this service.

The company is discussing partnerships with several international telecoms providers to arrange this. It will not happen overnight, however.

"Our expertise and focus is in the US (right now)," says Mr Weber. "Using PersonalLink, wireline and wireless capabilities are fully integrated. Wireline and wireline communications are normally separate, but with our service and the user interfaces being deployed on these devices (such as the Magic Link and the Envoy), they are seamlessly integrated."

AT&T gave it the name PersonalLink Services because it is supposed to be able to accommodate each subscriber's personal preferences for handling day-to-day tasks with the help of the "intelligent assistants".

Intelligent assistants can be thought of as extensions of the

people who dispatch them, and are brought to life by Telescript technology – a new communications language developed by General Magic. AT&T PersonalLink Services was the world's first communications service to incorporate Telescript technology.

Mr Weber explains that Telescript is to the telecoms world what the PostScript computer printer language was to the printer world. "These intelligent agents and assistants handle messages and interact with AT&T network," he explains.

"Telescript agents and intelligent assistants operate not only at the device level – they are not just sending ASCII [American Standard Code for Information Interchange] messages, but also these agents through interpretive computer networks. There are agents on the sender's mailbox and agents on the recipient's destination device."

In the US, people can subscribe to AT&T PersonalLink Services when they buy a personal communicator or other device that incorporates Telescript language capabilities. The first commercially available product with PersonalLink Services and Telescript built in was the Sony Magic Link personal intelligent communicator.

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be joined by Canadians and Europeans as users of this service.

The value of the stock rose 90 per cent in a single day.

General Magic promised to use the \$7m it garnered from the single-day sale of 5.5m shares to provide a Windows-based interface for fax machines and other office equipment.

General Magic will be doing its best to make this happen by arranging further deals to put its Magic Cap operating system on other hand-held computers over the next year. The company is developing a desktop version of Magic Cap so that desktop computer users can also have access to wireless messaging and exchange messages more easily with Magic Cap-based communicators.

This is a very powerful idea.

One strong indication of just how powerful the idea is comes from Wall Street in mid-February when General Magic shares almost doubled on their first day of stock market trading.

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## TELECOMMUNICATIONS IN BUSINESS 10

Mobile telephony: Joia Shillingford monitors developments

## Next big market will be in data

The business market for mobile phones is maturing, yet mobiles are not as ubiquitous as they seem. Cellnet's figures show that although 81 per cent of large companies in the UK have mobiles, only 18 per cent of staff use them. And mobile phones are not fully established in small professional businesses, such as firms of architects.

The next step is for mobiles to progress from being just a mobile version of fixed phones, into a properly converged product. This is already starting to happen.

Cellnet's Personal Assistant (PA) makes use of both fixed and wireless networks. Each user is given a single phone number and the PA software knows when they are most likely to be in the office or car, or at home.

When a caller rings the number, PA tries the most obvious phone (eg the office) and, if there is no reply, automatically tries the next most likely location (eg the mobile phone). PA has not been released yet; a trial of 500 users is under way.

Mercury One-2-One has a product which directs some of the calls that would usually go to a small company switchboard to mobiles. What happens is that when a caller phones the switchboard number, the call is automatically routed to one of a group of mobile phones.

The next time it rings, it goes to another of the mobiles and so on. This means that a small firm of architects, for example, whose staff are out a lot of the time, does not have to pay for a dedicated receptionist.

A number of follow-me services have also been introduced by fixed network operators such as Mercury and BT. These can switch calls from a fixed to a mobile number.

But the idea of universal personal telephony - where you are given a single number when you are born and retain it until you die - is still some way off, according to Bryan Van Dussen, a senior analyst at the Yankee Group Europe.

The obstacles are as much commercial as technological. "Although the idea appeals to mobile operators, it could

make mobiles appear to be little more than an extension of the fixed network," says Mr Van Dussen. "And then people might expect to pay less."

In the short term, what interests mobile operators is how to get people to spend more on mobile services. One way is to offer mobile data.

"Mobile data will be the next big mobile market," says Hubert Tardieu, head of telecoms at software and services company Sema. "It is likely to be even bigger than the market for mobile voice." This is partly because there are a large number of potential applications for the technology.

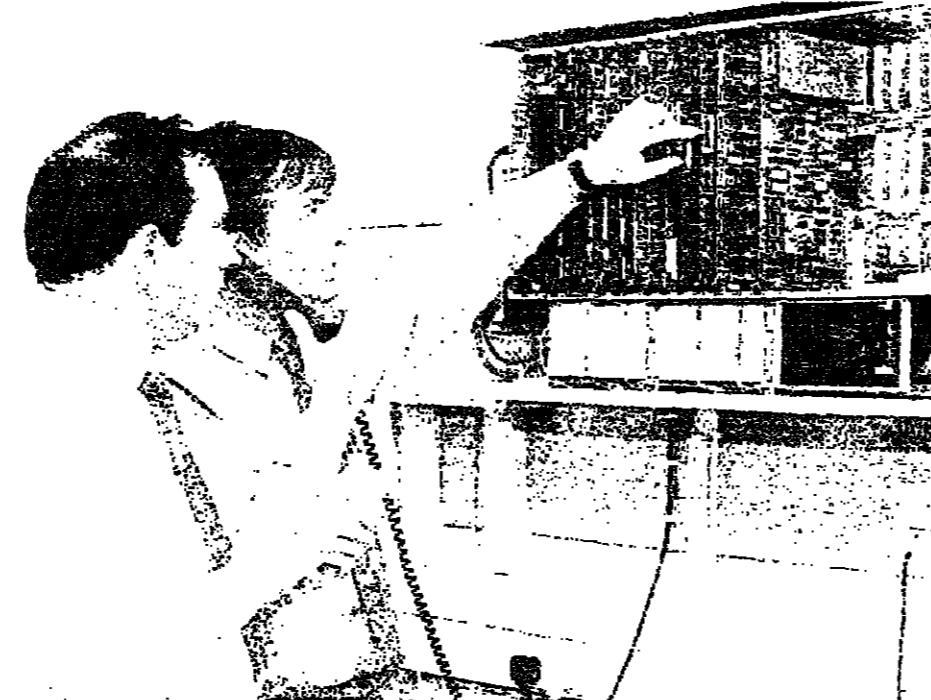
Two types of mobile data can be transmitted over the current generation of digital mobile networks such as GSM (Global System for Mobile) and variants such as PCN (Personal Communications Network). One is the Short Message Service (SMS), which is rather like alphanumeric paging and allows messages of up to 160 characters to be transmitted. This forms part of the GSM standard.

Data can also be transmitted from a portable PC as, say, electronic mail or faxes, via GSM. All the user needs is an interface card slotted into the PC. This has a cable which links the card to a suitable GSM phone (such as Nokia's) and allows data to be transmitted via the wireless network into the fixed one.

Digital networks are better for data transmission than cellular networks because speeds are higher and data is less likely to be corrupted.

Mobile operators providing data services include Vodafone (in the UK), Deutsche Telekom and Mannesmann (in Germany) and Telia in Sweden. SMS has been a big success in South Africa where it is used for fleet management (helping to locate and issue new instructions to truck drivers), but the technology is most commonly used to notify users of new voice messages. Hutchinson's Orange PCN network plans to introduce mobile data at the end of June.

In addition to mobile data, network operators are trying to generate extra revenue and



Technical support engineers at GPT Communication Systems maintain fixed and cordless exchanges



GPT offers two-way messaging-paging with in-built acknowledgements

gain competitive advantage by offering enhanced services. According to Dataquest, a quarter of cellular phone subscribers used voice mail in Europe last year.

Voice messages, left by callers when the mobile they are calling is switched off, are usually free but generate extra

UK cellular telephone subscribers				
Operator	System	Launch	Subscribers May 1985	Subscribers May 1994
Cellnet	TACS-900	Jan 1985	1,752,900	1,057,359
Cellnet	GSM	Jan 1994	41,000	n/a
Vodafone	TACS-900	Jan 1985	1,885,450	1,202,376
Vodafone	GSM	Jul 1992	194,750	40,118
Mercury One-2-One	DCS 1800	Sep 1993	275,000	631,54
Orange	DCS 1800	Apr 1994	64,000	227,38
			157,000	n/a

mobile operators Vodafone and Cellnet have both come up with packages to encourage them to switch. This is partly because their analogue networks are almost up to full capacity.

In the long term, analogue networks will probably be used by consumers rather than business users, then phased out.

As the business market for mobiles has matured, the consumer market has exploded. And in the consumer market, mobile phone use has had a slight impact on the use of fixed telecoms. Consumers have made such extensive use of Mercury One-2-One's PersonalCall tariff - offering free calls at evenings and weekends - that it has increased the monthly subscription charge from £12.50 to £15.00.

But one day the difference between mobile and fixed telephony could be invisible. Users will simply own a phone that connects to whatever service is cheapest and most convenient at the time.

Joia Shillingford is Associate Editor of the Financial Times newsletter Business Computing Brief



Nokia Orange mobile phone: what interests mobile operators is how to get people to spend more on services

be used to provide information services. Visitors to South Africa for the Rugby World Cup can dial voice mail numbers on the Vodacom mobile network to find out about hotels and restaurants.

Swedish telecoms operator Telia plans to offer a hybrid GSM-DECT service. This would allow users to make calls from an Ericsson handset inside their offices using DECT (the Digital European Cordless Telecommunications Standard), but switch to GSM when they leave the building. If the tests, using dual-mode handsets, are successful, it will launch a service next year.

As the number of services available over mobile phones

expands, a new type of pan-European service provider is emerging. For example, UniSource Mobile (a consortium of Swiss, Swedish and Dutch telecoms operators, which has links with AT&T) plans to provide a one-stop service for large companies using mobile voice, data, paging in several European countries.

It will provide consultancy, a single bill and buy and repack air time for its clients. It will also have stakes in or alliances with mobile network operators.

Most of the mobile data and enhanced services are being developed for digital mobile networks (either GSM or PCN). This will help to encourage business users currently using old analogue networks to

transfer. At the end of last year only a fifth of Europe's mobile phone users were using digital networks (based on Dataquest figures). The proportion is likely to increase as new users sign up for digital services. A big incentive is that GSM handsets can be used anywhere in Europe that has a GSM network.

According to the Financial Times newsletter Mobile Communications, there were 16.3m cellular telephone subscribers in western Europe on May 1; up 61 per cent on the year before.

Existing analogue mobile users can upgrade to digital without a change of phone number (although they will need new handsets) and UK

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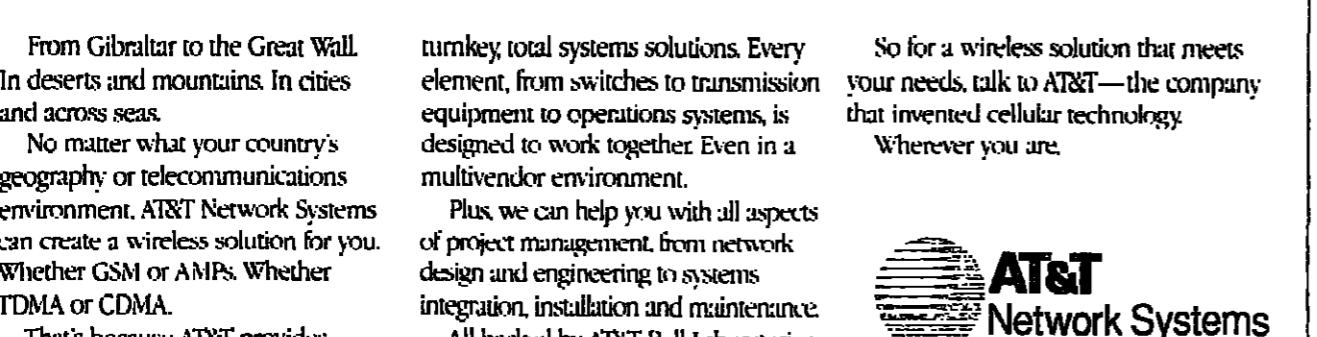
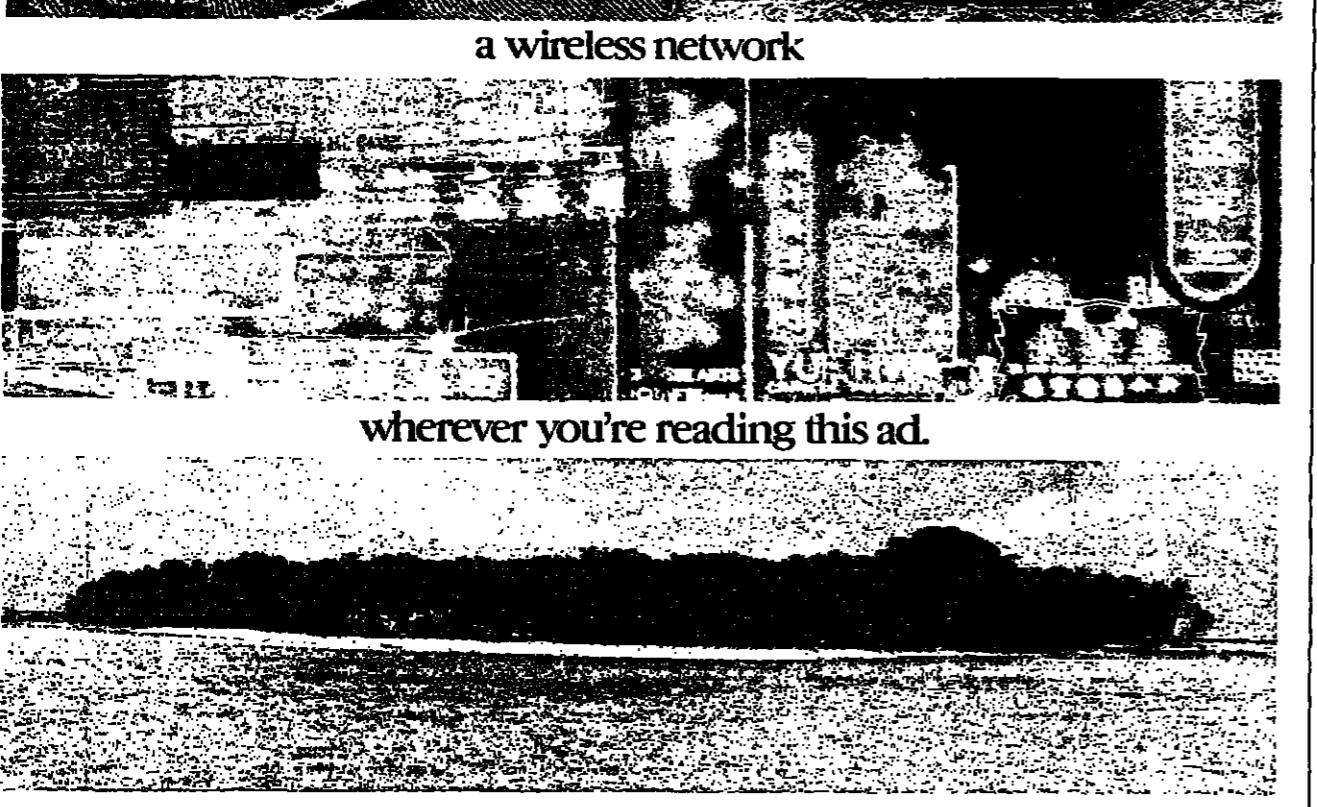


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## TELECOMMUNICATIONS IN BUSINESS 11

UK cable networks: Raymond Snoddy reports on a change of emphasis

## Focus switches to telephones

Telecommunications has become a central part of what used to be the cable television business in the UK and indeed many operators now expect the majority of future revenues to come from the telephone rather than extra channels of television.

In recognition of the change in emphasis, the Cable Television Association has even changed its name to the Cable Communications Association. The latest official figures from the Independent Television Commission show that by the beginning of April no less than 75 cable franchises were offering telephone and that 789,315 residential lines had been installed plus a total of 83,258 business lines.

The figures are very respectable given that the total number of homes subscribing to cable services of any kind is only around the 1m mark.

What is more remarkable than the total numbers of lines is the rate of increase in tele-

Cable operators have also found that the "churn" or disconnection rates are much lower for telephone subscribers than for those who just want extra television channels.

The UK was the pioneer in deregulating the telecommunications industry to allow cable to offer competing telephone services, although Mr Karel Van Miert, the European Union competition commissioner, hopes this will be law throughout the EU by 1998.

In business telecommunications, the extra competition for BT has developed slowly since the end of 1987 when Windsor Television, one of the first of the experimental cable television franchises, began offering telecoms services to 30 companies on the Slough trading estate in its franchise area - a scheme that had spread to more than 500 businesses within the next year.

Since then, it has become obvious just how important the business sector is to the cable industry - mainly because businesses are heavy telecoms users and when they switch to cable they tend to install multiple lines.

At General Cable, majority owner of The Cable Corporation whose franchises include Windsor, business communications revenues exceeded 50 per cent last year.

Mr Philippe Galteau, managing director of General Cable, believes that if the monthly gross margin on cable television services is 1 per cent then the margin on a residential telephone line is 1.4 per cent, but on each business line it is between 5 and 7 per cent. The business subscriber becomes even more valuable because The Cable Corporation's average business customer installs seven lines.

The main attraction to the business user is price. The cable industry says it can offer average discounts of between 10 and 15 per cent - although terms vary between different cable areas and BT has been responding to the competition.

One big disadvantage - and



Laying ducts for fibre optic cable on the Colt network in London

one that is the subject of considerable contention between the cable operators and BT - is number portability. At present, a company switching to cable telecoms has to change its number, something that many are reluctant to do. Instead, many install a number of lines for outgoing calls.

Ofcom, the telecoms regulatory body, has decreed that number portability is vital to effective competition but BT

and the cable industry has been unable to agree on what for the changes. The issue has now become entangled in a broader Monopolies and Mergers Commission investigation and will probably be delayed for at least a year as a result.

Despite this disadvantage,

the cable industry has come up with a number of initiatives designed to encourage the growth of business telecoms.

Perhaps the most important is ICN, or Integrated Communications Network, which exploits the London interconnect that links all the main London cable franchises. It was designed initially for television programme exchange but is now also being used for business.

Companies with branches throughout the M25 area can be linked yet deal directly with ICN and get a single bill rather than having to deal with a number of separate cable companies.

Plans are well advanced for similar interconnects in the Midlands, the North of England and Scotland. This raises the possibility eventually, if the cable operators can agree, of communication links between the leading cable franchises in the UK.

The big regional groupings

would probably lease capacity to link them from other telecoms operators rather than building the connections themselves.

Other cable services offered to companies include the use of sophisticated PABX exchanges without having to own them. The equipment is located at the cable company headquarters which handles the telecoms needs of local businesses.

Videotron, the Canadian group which is one of the largest cable operators in the UK, has now launched a PC-based business information service for subscribers in the Westminster area.

Because BT has the cable licence for Westminster, Videotron cannot offer a competing general cable television service to residents. Videotron can, however, offer a raft of specialist business television information direct to business PCs, including a special news service from Reuters.

The service gives an indication of the range of possibilities that cable telecommunications is likely to offer in future beyond trying to compete against the established telephone companies on price.

The videoconferencing industry believes its time has come, writes Sheila Jones

## Ready to go for a mass market



The technology is improving: it is possible to provide broadcast-like picture quality over digital telephone lines

Everything seems to be falling into place for the videoconferencing industry. Standards are being agreed, processing power is increasing, and there is a growing demand for new and better channels of communication.

The industry believes its time has come. No matter that it has been saying so for some years. There is a growing conviction that videoconferencing is ready to go for a mass market.

Sales are rising particularly for systems based on personal computers. In the past, large, expensive room-conferencing and portable systems have dominated the market.

GartnerGroup, the US research organisation, suggests in a recent research paper, that the market is shifting rapidly in favour of PC systems. It points out that producers are now bundling videoconferencing capacity with other software rather than selling it as a distinct application. This will change further in the next couple of years, Gartner predicts, with videoconferencing likely to be embedded in most software applications programs as standard.

There are several factors fuelling demand, says Tim Duffy, European vice-president at PictureTel of the US. "We've got the convergence of processing power being available to produce very good, high-quality pictures; we've got a network that's come into place - the ISDN network - which is

fall further if videoconferencing is to make an impact beyond niche markets.

The add-ons needed to enable PC videoconferencing can cost about \$3,000 or more per terminal. John Matthews, a consultant at Ovum, the UK-based research group, says prices "need to head for about \$1,000 to \$1,500" before such investment is no longer seen by business managers as a difficult decision.

Nonetheless, niche markets are already fuelling sales. Law firms, publishers, health and design agencies are early users. Telemedicine is catching on around the world, particularly in the US, where doctors are making remote diagnoses of patients through mainly PC-based videoconferencing networks.

Health agencies say the technology is helping them to cut travel costs and widen access to treatment. Medical applications are also growing in Europe. In the UK, a pilot scheme is under way in Montgomery, Wales, for dermatology patients. The system, which operates on British Telecommunications equipment and IBM software, allows GPs to refer their patients to a specialist live from the doctor's surgery. Specialists can examine a patient, looking at stills or moving pictures. They can discuss the case, share medical notes and make diagnoses via the PC.

Philip Hamer, who runs a firm of solicitors in Hull, in the UK, uses Intel's Proshare system to replace conventional meetings with barristers and witnesses before trials. Mr

Duffy: "There is huge demand for communications around the globe"

Hamer says the firm has saved time and dramatically cut travel costs. He adds that videoconferencing is "much more intimate than the phone".

Data compression - which enables pictures, sound and text to be transmitted on phone lines - has yet to produce the sort of quality we see every day on the television. Pictures on PC-based systems can be juddery, and some systems are better than others at reducing sound echo and improving sound and picture synchronisation. But the industry argues that live pictures can dramatically improve communication.

Research in the US has indicated that only a small amount - possibly as little as 11 per cent - of the information a caller wishes to convey is communicated in a conven-

tional telephone call.

"If I send you some information by fax, and then I follow it up by calling you, I can probably convey about 23-24 per cent of the information. I'm really trying to communicate," says Nigel Grierson, Intel's European director for personal conferencing systems. "If I could see you, and use body language and expressive language and share the document and talk to you, we would be way up into the 50s. It will never replace personal contact, but it will get you out of the 11 per cent zone of effective communication."

The industry still has work to do. It recently agreed the H320 standard on data transmission.

This means that different systems in local networks can communicate with each other if they conform to the standard, and users need not be locked into one supplier.

There are still arguments

within the industry over whether videoconferencing needs its own, dedicated processing power plugged in to the PC, or whether more powerful processors will run all a PC's operations without interfering with or slowing down different applications. Plug-in processing power, advocated by suppliers such as PictureTel, Compression Labs and GPT, has the upper hand at the moment. But Intel argues that the future lies in more powerful processors running all applications.

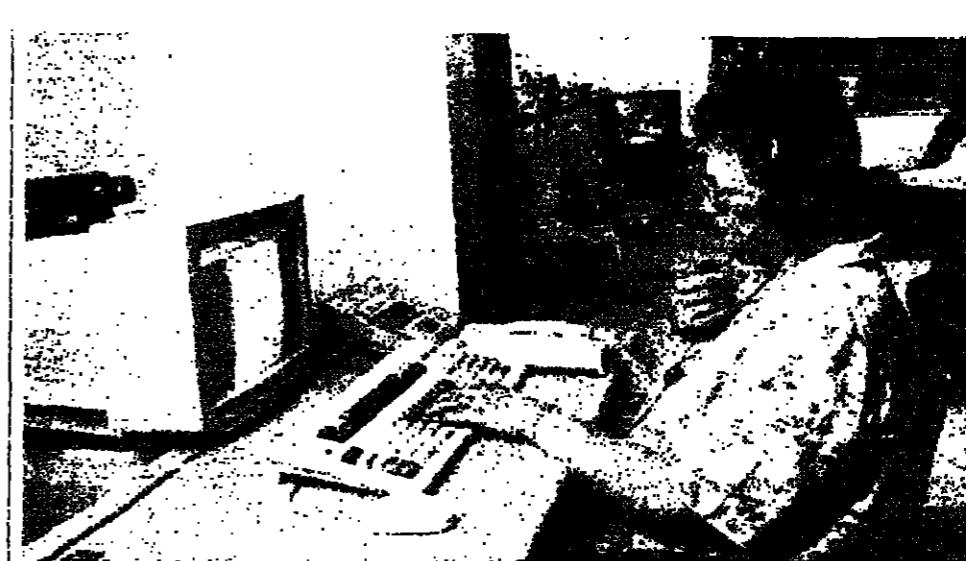
Critically, videoconferencing equipment manufacturers must agree a standard to enable live exchange of data across disparate systems. The International Telecommunications Union, the industry's standard-setting body, is optimistic that there will be agreement soon on its proposed standard, T120.

It is data exchange, enabling users to share and annotate graphics and documents, such as spreadsheets or X-rays, that appears to add most value, making the equipment more than a telephone with pictures.

The industry must also produce systems that will allow users to take their networks beyond local areas to communicate with other networks operating on different systems.

The infrastructure is in place to allow the market to grow. The technology is improving and prices are coming down.

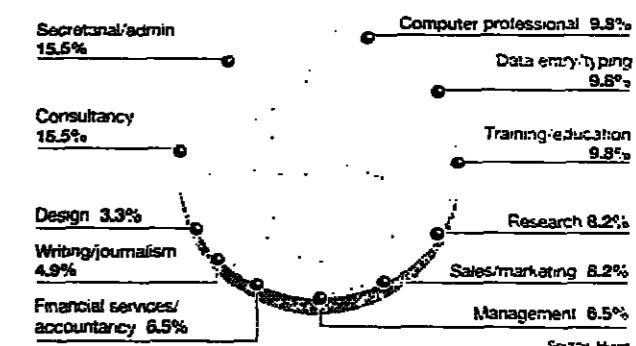
The industry, with an eye on climbing revenues for telecoms, hardware and software operators, seems to be finding its market.



Christopher Price looks at teleworking

## Numbers stay limited

## Teleworkers' occupations



workers at 560,000, according to the early EU research data.

However, the definition of teleworking was a broad one and included employees who worked from home electronically for only one day a week.

The figure fell to 130,000 when considering just those workers who were employed electronically at home on a full-time basis.

France, in second place, had

about half the UK total, with the other three countries about half as much again.

But other studies dispute the findings of the EU report. A 1993 French academic study put the number of teleworkers in France at just 16,000, albeit under a strict definition. However, the same report suggests that there will be about 350,000 French teleworkers by 2005.

The EU report claims that the number of teleworkers is likely to eventually rise to 11m - but declines to put a timescale on events.

In the US, where teleworking is more developed, the number of workers has been estimated at about 4.5 per cent of the working population - or approximately 5.5m people. However, on a more detailed analysis, only 16 per cent of the sample - undertaken by a US university - telecommuted 35 or more hours a week.

Another study, by the Institute for the Study of Distributed Work, based in California, estimates that between 3m and 5m people, or 8-10 per cent of the US workforce, are teleworkers.

One thing is for sure, fore-

casting difficulties are not technologically-driven. Rather they are rooted in the complexities of organisations and the nature of work.

The potential benefits of teleworking are many. Home-based workers save on commuting time and travelling costs are correspondingly reduced. Teleworkers can also benefit from working in a more pleasant environment - the electronic homeworker connected to the superhighway from a distant rural site being the stereotypical image of the teleworker.

Workers can also gain from more flexible work patterns. Employers can benefit from correspondingly lower office costs. Teleworkers will be at their desks longer and, it is claimed by some experts, be more productive in a less stressful, more comfortable work environment.

But one of the biggest obstacles for would-be teleworkers is middle management, a factor emphasised in several studies. According to the Newcastle University report, this management tier fears both loss of status and difficulties controlling an absent workforce.

In addition, many employees prefer to work in traditional offices. Some people prefer to work alone but for many others the office or factory represents a social milieu as well as a workplace," says the Newcastle report.

*Review of Telework in Britain: Implications for Public Policy, University of Newcastle, Newcastle NE1 7RU. Price £20.*

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Please contact us for our publication "Guide to Doing Business in Denmark".

A new communications tool - the hand-held satellite telephone - will almost certainly be available to business people by the turn of the century. It will provide cellular phone-like voice and data communication between any two places on earth at an affordable cost.

The race to build the costly and complicated infrastructure for the service, however, has generated a bizarre development: an attempt - defeated at the last moment - by one of a number of competing consortia to "patent space".

Today's cellular networks have made mobile telephony cheap and effective, but they are limited to geographies where base stations can be installed economically.

Whole areas of the earth's surface including the deserts, ice caps and tropical forests are not covered by cellular networks.

In the past it has been possible to provide mobile communications in these areas, but at a price. Inmarsat, the international organisation owned by its member companies which pioneered maritime satellite communications in the early

1980s, can make global satellite connections anywhere today, but calls cost up to \$10 a minute and the equipment to make and receive them fills a large suitcase and costs about \$25,000.

The object of a global satellite telephone service is to be able to receive and transmit calls from mobile phones no larger than today's cellular handsets at a cost of \$3 a minute or less. It is being made possible by improvements in satellite systems, wireless technology and the miniaturisation of components.

Who could make use of such a service? The list includes international travellers whose business takes them to areas where cellular coverage is poor or non-existent; long-haul commercial vehicle operators travelling nationally and internationally; fishing boats, yachts and other small craft; and short-haul commercial and general aviation aircraft. Explorers, geologists, field scientists and civil engineers could all make use of satellite phones.

## TELECOMMUNICATIONS IN BUSINESS 12

### The battle over satellite communications has begun, reports Alan Cane

## Attempt to 'patent' space is thwarted



Madley earth station: competing consortia claim there will be substantial rewards for satellite operators

Mobile satellite systems will be fully integrated with existing fixed and cellular telephone networks. It would be possible, therefore, for a call from one mobile hand-set to be received by a satellite and transmitted again on to another handset or passed to a ground station for transmission onwards by conventional cellular or fixed wire telephony. The handsets are expected to be dual purpose, able to

switch from conventional cellular telephony to satellite telephony as required.

Given the growth and popularity of conventional mobile telephony - there are expected to be at least 100m users of cellular phones by the year 2000 - the consortia now competing to provide satellite telephony are hardly to be doubted when they claim there will be substantial rewards for successful satellite operators.

Creating a mobile satellite system is expensive, technolog-

ically challenging and fraught with risk. It is, moreover, unlikely that the market will be able to support more than two or three profitable operators.

This is why an extraordinary race between six or more consortia to establish the first satellite system is now under way.

The pioneer was Iridium, a consortium led by Motorola of the US, the largest manufac-

turer of mobile phones. It is planning to build more than 70 satellites and launch the first in 1997. It has raised \$1.5bn in equity and is seeking loans of a further \$1.5bn to complete the first phase of the project.

Among the other competitors are Globalstar developed by Loral, the US defence group, and Qualcomm, together with Ellipsat, Constellation Communications and American Mobile Satellite Corporation.

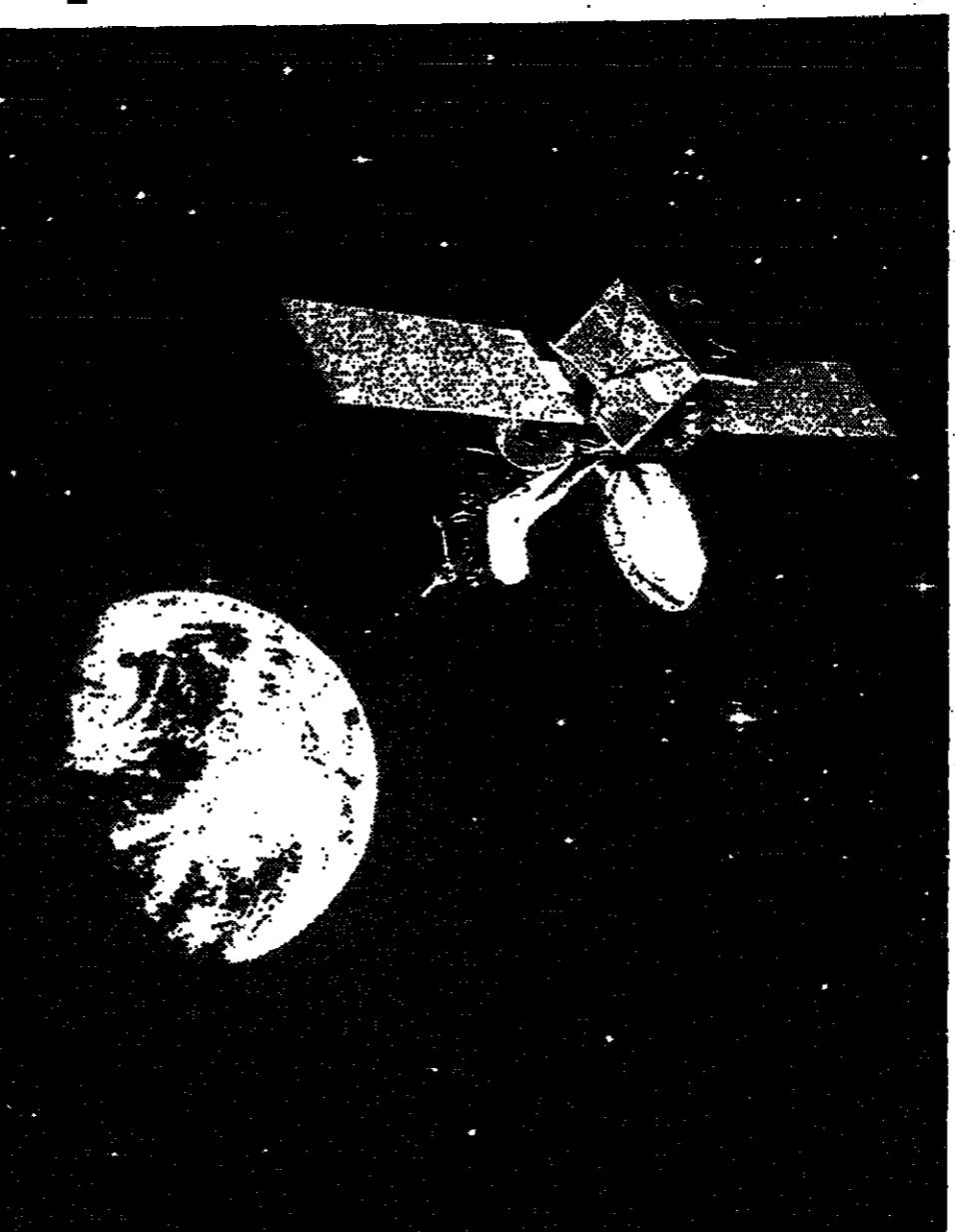
Mr Bill Gates, chairman of Microsoft, the software house, and Mr Craig McCaw, a wealthy cellular phone pioneer, have also united to declare an interest in developing a satellite phone system.

The only Europe-based contender is Inmarsat-P, a wholly-owned offshoot of the Inmarsat organisation. Some 39 of its members agreed last January to contribute \$1.4bn in funding the initial phase of a project

or the geostationary satellites used for communications today.

TRW claims to have invented the medium earth orbit.

There are essentially two low-cost approaches to satellite telephony. The first - low earth orbit, favoured by Iridium - involves launching between 20 and 66 satellites in an orbit less than 10,000km above the earth's surface. The second, medium earth orbit involves placing only 12 or so satellites in space between 10,000km and 20,000km up. Odyssey and Inmarsat-P both favour this solution, which they claim is much less expensive than either low earth orbit



It is estimated there will be more than 1m personal mobile satellite customers by 2000

BT Pictures, BT photographs

expected to cost \$2.5bn at 1994 prices.

In the early part of this year, only Iridium and Inmarsat-P had completed their first-round funding and were therefore seen as favourites, others being equal to win the race.

Other things were not equal, however. Odyssey, a joint venture between TRW, the US aerospace manufacturer, and Teleglobe, a Canadian telecommunications operator, which is in the process of raising \$1bn in funding, dropped a bombshell in April this year declaring it had been awarded patents by the US Patent Office for key elements of the satellite system.

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TRW claims to have invented the medium earth orbit.

or the geostationary satellites used for communications today.

TRW claims to have invented the medium earth orbit. A patent on the orbit would hamper severely Inmarsat-P's progress in the satellite race. The US company said: "These patents give TRW an advantage for our mobile communications system".

In the event, the patents were dramatically withdrawn by the US Patent Office on the expected day of issue. While the reasons are not fully understood, it is thought the controversy stirred up by TRW's apparent attempt to "patent space" forced the Patent Office to review the issue.

It is entirely possible that elements of the Odyssey system are unique and that patents will eventually be granted for them. But it is unlikely to be able to keep Inmarsat and others out of medium earth orbit. There will be more earthly skirmishing before the battle in space can begin.

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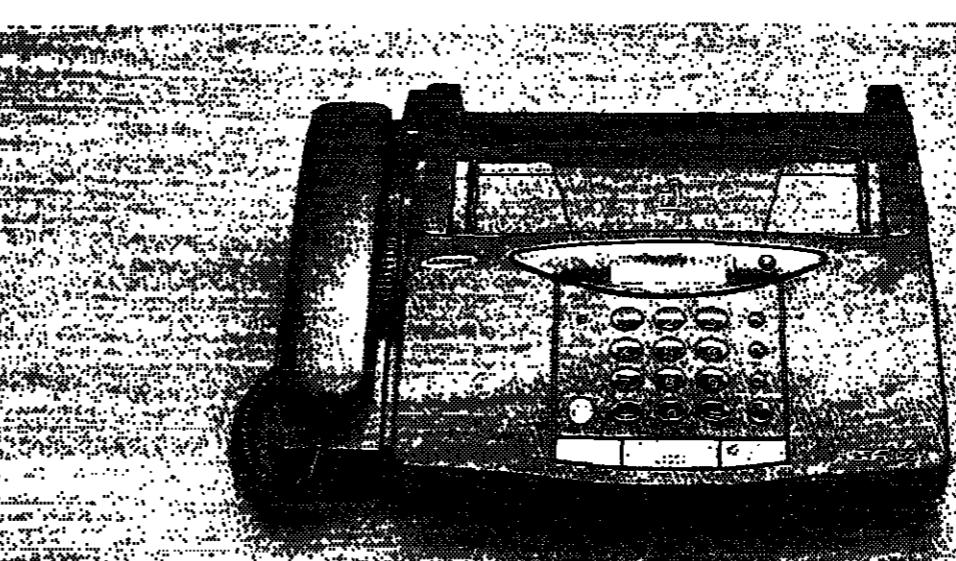


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average business executives and managers work 40 hours a week - or 10 per cent more than the average basic business executive. As such as phone numbers, one would expect the number of trains to be the same. But the number of survey participants in the UK is 10 per cent higher than the average business executive and other staff overheads are 100 per cent of salaries; the average annual wage is about £15,000 for each staff member. So, we are in the industry.

First, place, it would appear the UK could provide us with the best service in the world. We would expect just 0.1% of the staff to be lost. It is true that a 7% annual rate of loss is better for computers, which are not necessarily as good as telephone lines. It is not sufficient that the staff are not lost. We are in the industry.

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## TELECOMMUNICATIONS IN BUSINESS 13

ISDN has finally caught on in Britain, reports Richard Handford

## Fresh applications emerge

1995 is proving to be the year when two previously unsuccessful data technologies came into their own: the integrated services digital network (ISDN) and the transmission of data over wireless networks.

The two technologies appear to have found solutions to the woes which had previously left them in obscurity. The emergence of new applications is helping both ISDN and mobile data to finally strike it rich with customers.

Of the two types of ISDN service offered in the UK - basic rate or ISDN2, offered only by British Telecommunications, and primary rate or ISDN30 offered by both BT and rival Mercury - it is the former that is attracting attention for its new data applications. ISDN2 is used mainly to carry voice traffic.

Over the past two years, ISDN2 has moved away from being purely a back-up service for a customer's private circuit. Two years ago, 53 per cent of ISDN lines were only used in times of exceptional demand when excess data could overflow onto them. Now the situation has changed as customers choose ISDN for applications such as file transfer, the interconnection of computer local area networks (Lans) and access of remotely situated Lans. These applications now account for nearly 50 per cent of all ISDN lines and the fall-back option accounts for only 14 per cent of lines.

The new-found popularity of ISDN has benefits for BT since the newer applications are likely to generate higher call revenues.

BT likes to talk about the growth in ISDN2 connections, pointing out that grew by 147 per cent in the financial year 1994-95. However, it should be remembered the original base was so low any growth looks impressive. BT itself does not reveal the number of ISDN2 connections but industry opinion puts the figure at about 55,000 at the end of 1994.

The UK lags far behind other European countries in the ISDN stakes. At the end of last year France had 250,000 basic rate connections and Germany 150,000 in the region of half a million.

The usual argument put forward by BT's critics for the discrepancy is the cost of ISDN2 installation that elsewhere in Europe BT's £490 charge is viewed as an important barrier to new users, particularly among small and medium-sized businesses and residential customers.

Critics point to the cellular industry where low entry price in the form of cheap hand-sets has led to an explosion in demand. BT replies that the structure of competition in the UK's fixed telecoms market precludes this kind of bold pricing move.

Some believe that entry price notwithstanding, an important period of rapid growth is imminent for ISDN

among users outside the corporate market. It will be the result, says Keith Mallinson of the Yankee Group consultancy, of an unlikely alliance between "centralised, bureaucratic" ISDN, the brainchild of conservative telephone companies, and the "organic, anarchic" Internet.

Mr Mallinson foresees Internet access as a huge market for ISDN. Particularly if BT's installation charges come down.

The problems for the UK's mobile data industry have been even more severe than that of ISDN. Subscriber numbers have doubled over the past year but only from 20,000-30,000 to 40,000-50,000 as the

UK's four specialist operators seem largely to have searched for niche markets such as organisations with employees working out in the field.

Now some in the industry see the opportunity to reach a wider audience. "The holy grail is to connect the millions of lap-tops around Europe to a mobile data network," says Martin Garner of the Ovum consultancy. "It's a bigger market than that for traffic wardens and policemen."

Mr Garner believes the evolution of technology and new approaches to the way the service is offered will open up a huge potential market among travelling executives. The means for serving this market is likely to be the GSM digital cellular networks now used by millions

of mobile phone customers across Europe. The network has the capability to carry data as well as voice services.

Operators of GSM networks want their customers to connect their phones to a modem and laptop to send data. Such a service would boost the call revenues for the network operators. The technology for the network operators.

The technology to facilitate this is now

available. Last year, leading telecoms manufacturers including Ericsson and Nokia began to make commercially available the necessary modems, and the software package Microsoft Windows 95, to be launched this summer, will put a heavy emphasis on its mobile data capabilities.

In the UK, cellular operators Cellnet and Vodafone already offer data services over their GSM networks. Orange, one of the UK's two Personal Communications Network (PCN) operators, is also thought to be interested.

The UK has also seen the emergence of service providers in the mobile data market with BT's decision earlier this year to sell a service over Cellnet's GSM network. BT, which owns a 50 per cent stake in Cellnet, will offer the service with US computer manufacturer Apple.

The role of service providers, who do not actually own a network but use their marketing skills to attract customers, has been judged crucial in the growth of the UK's cellular industry and might likewise invigorate the mobile data market.

superhighway speeds, today's pricing models make a line so expensive that even the largest corporations cannot afford them.

BT is getting around the issue with SMDS by putting it in a different class of service - it is tariffed as a systems licence service which means that BT does not have to link it to existing line prices. The service tariff is at a flat rate, irrespective of the distance between the two sites to be connected.

But Mr Hughes fears that irrespective of service availability or tariff drops, most businesses are a long way from being able to take advantage of the superhighway.

"The number of organisations that are yet thinking about how they might exploit the benefits of the superhighway are few and far between. And there are even fewer that can conceptualise the benefits."

Other companies are looking at the much higher speed lines offered by the UK's new telecoms operators. Yorkshire-based Torch Telecom says it is talking to financial institutions within its Yorkshire-North Humber region about providing a managed telecommunications facility at 155 megabits a second. The facility would be used to improve communications to high street branches, especially where they are using client-server, lan-based software applications.

Torch Telecom has already installed a 34 megabits a second link for the Leeds General Infirmary and St James's hospital. It is used by trainee surgeons who watch keyhole surgery operations taking place in an operating theatre on the other side of town. They can converse with the surgeon using a video conferencing unit.

However, before such facilities become available on a national or global basis, the cost of the lines has to come down. Traditional pricing of telephone lines is done by distance and by speed. But, at the

same time, the cost of the lines is

increasing as the speed of the lines is increasing.

Mr Lynch thinks that the expression "electronic data interchange" is itself a deterrent to many managers, to whom it sounds too technical.

However, there are plenty of examples of companies which have prospered by adopting EDI to encourage others to copy them. The most quoted case in the UK is probably that of the Tesco supermarkets

EDI is making slow progress, says George Black

## UK still leads the field

A couple of years ago the leading industrialist Sir John Harvey-Jones criticised his senior business colleagues for failing to take advantage of electronic data interchange (EDI).

Today, he would probably find that not much has changed. Only between 10,000 and 20,000 UK companies have adopted electronic or paperless, trading - yet the UK is still ahead of most European countries and in some fields also ahead of the US. Even among the UK companies which have adopted EDI, many still make very limited use of it and some still do extensive and avoidable rekeying of data.

Mr Jenkins contends that what EDI in the UK needs now is an articulate advocate. In the US, Vice-President Al Gore has championed the cause of building an information superhighway and thereby greatly increased public awareness worldwide of the potential of the Internet.

"We need an Al Gore to help us bring EDI to the top of the

chain, which has revolutionised the way it does business in the past few years. The improvement in the efficiency of its supply chain is generally recognised to be an important component in its success.

But for every Tesco there are dozens of other big and small companies which have been unresponsive to the new technology.

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"We need an Al Gore to help us bring EDI to the top of the

The popularity of Internet gives EDI promoters a new opportunity

management agenda," says Mr Jenkins. "It can make UK plc more competitive. We have a lead, but we must maintain it."

"There is a lack of clear direction from the government side," complains Mr Lynch. "What we want to see is government using it more. This would send a signal to UK industry that it is a better way to trade."

The popularity of the Internet gives the promoters of EDI a new opportunity. Mr Lynch says: "I am trying to ride the wave of interest in the Internet, to explain to people that EDI and the Internet are both part of electronic commerce."

Perhaps the most contentious issue in the area of electronic trading at the moment is whether the Internet is capable of becoming a vehicle for this type of activity.

Mr Jenkins argues that it is not yet ready, mainly because of the lack of security, but he thinks that it is already playing an important role in promoting the understanding of the electronic marketplace and "extending the shelf space of suppliers."

Among small and medium-sized businesses, EDI is still seen as a mixed blessing. Many managers are afraid of the

technology or just do not have the time to study it.

More positively, many small businesses find that being able to advertise their competence in EDI can bring a rapid increase in business. A survey by the EDI World Institute last year found that nearly 70 per cent of such companies reported improved efficiency from EDI and more than half experienced improvements in financial performance.

As more global standards emerge, EDI should also enable them to build international businesses.

The Association of British Chambers of Commerce is involved with the Edia in a two-year programme backed by the European Union to promote the use of EDI among small and medium-sized enterprises. Ms Elizabeth Boyd-Adams, its commercial director, says: "Up to now, smaller companies have been on the receiving end of instructions from their customers. We want to level the playing field so they can make informed decisions about the best technology to adopt."

"It's the language of the future, as far as we are concerned, for trading in the international marketplace."

One problem which is still deterring many smaller businesses from moving to EDI is the difficulty of integrating their accounting software with EDI systems. They have had to call on the services of a software house to glue the systems together, and many have felt it was not worth the trouble or the cost. However, some of the top accounts package vendors such as Multisoft and Pegasus have now started to provide an interface from their programs to EDI systems. Other leaders in the field are likely to do the same.

Meanwhile, the Edia has developed a proposed standard application programming interface which should be available to systems developers by the end of the year.

These developments may contribute to making EDI more attractive to the hundreds of thousands of smaller UK companies which have yet to enter the brave new world of electronic commerce.

## Profile: the EU-funded Visinet project

## Aid to collaboration

Architect and his client - one based in Lisbon, Portugal, and the other in Eindhoven, Netherlands - walk together around a 'virtual city' examining new designs and road layouts...

This is no longer a futuristic vision of what might be, but something which has been taking place in the past six months, writes Monica Horten.

The virtual city has been made possible by a European Commission-funded project known as Visinet, investigating the uses of an information superhighway for architects and industrial designers.

The project, which cost Ecu2m, provides the facility for the City of Eindhoven to employ a Lisbon architect to

re-model large areas of the city. Using three-dimensional visualisation software on high-powered Silicon Graphics workstations, with an eight megabits a second transmission link between the two cities, the client and architect are able to hold discussions without meeting in person.

Visinet indicates which many businesses could obtain if they choose to exploit the new superhighway technologies. The information superhighway will provide transmission speeds that are many times that of even the fastest telephone lines in use today: the average data transmission today is at 64 kilobits a second (also the speed on an ISDN connection). Some companies have lines at 2 megabits a second, and a rare few might have more than that. The superhighway speeds will provide up to 155 megabits a second, and eventually even higher, up to 2 gigabits a second.

In practice, that means that a four-page multimedia document, including video clips and images, would take only one second to transmit, compared with 41 minutes today. And the technology is dis-

persed directly for the first time, eliminating the middle operator. Thus business gets feedback directly into how its products are being used," he says.

But many businesses will take advantage of the superhighway just to improve what they have today. Most companies now run at least some of their computing systems on local area networks, or Lans, using software that is known as client-server. Client-server software is designed so that any terminal can theoretically access any host or server computer. In practice, people in different parts of the business can get into databases other than those in their department, with the result that business information is shared across the wider organisation.

Hans, Lans transmit at 10 megabits a second on average. Today, they cannot maintain their transmission speeds on links to external sites, because of the limitations of telephone lines. In other words, where it takes a few seconds to get data from a database in the same building, it takes minutes to retrieve information from one on another site. The information superhighway will solve the problem so that businesses should be able to operate more efficiently across different sites and countries.

Some companies are already beginning to take advantage of the early high-speed lines that are becoming available. BT, for example, claims that about 30 customers are already using its high-speed service known as SMDS (switched multimegabit data service). Transmission is possible at varying speeds up to a maximum of 25 mega-

bits a second to any other computer connected to the network. In practice, a document transmitted from London to Belfast will begin to appear on the recipient's screen within one hundredth of a second.

The Inland Revenue has 10 data processing sites connected to SMDS via 10 megabits a second links. The bank's clearing house, BACS, is using it for cheque and credit clearing, with some 12 clearing banks connected, mostly at speeds up to 2 megabits a second. And BT has recently signed contracts with the NHS and Railtrack.

Other companies are looking at the much higher speed lines offered by the UK's new telecoms operators. Yorkshire-based Torch Telecom says it is talking to financial institutions within its Yorkshire-North Humber region about providing a managed telecommunications facility at 155 megabits a second. The facility would be used to improve communications to high street branches, especially where they are using client-server, lan-based software applications.

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However, before such facilities become available on a national or global basis, the cost of the lines has to come down. Traditional pricing of telephone lines is done by distance and by speed. But, at the

## ON-LINE INFORMATION SERVICES

## Specialists provide the key

On average, business executives and PAs spend four hours a week - or 10 per cent of their time - obtaining basic business information such as phone numbers, company information and times of trains. This was one of the findings of a survey carried out earlier this year by Benchmark Research on behalf of Phonelink, creators of Tel-Me, the on-line business information service.

With the average UK executive salary at £40,000 and other staff overheads running at about 100 per cent of salaries, the cost of information-gathering by executives is therefore about £3,000 for each employee. Hence, although we are in the information age, there is a high cost in obtaining that information.

At first glance, it would appear that the Internet could provide us with the solution to our every need. We would be able to find the exact information we wanted on any topic just by "surfing the web".

It is true that a vast amount of information is stored on computers around the world - and a considerable proportion of it can be accessed via telephone lines. However, it is not sufficient that the information exists; one must know where it is and how to access it. And it is sometimes necessary to filter mountains of data to locate the specific information required. A number of specialist operators have grown to meet these needs.

There is nothing new in having specialists to assist in obtaining information. Librarians and information specialists manage and obtain information as well as filtering and sorting it prior to presenting it for management.

Much of this information falls into two basic categories: the general, such as phone numbers, travel timetables and

road information; and the special which may relate to markets, product specifications, data sheets and price lists.

Before the Internet, it was a simple task to despatch someone to get the necessary information. Today, however, we need more effective ways. Consequently, information services companies target large installed bases of potential users - such as Windows-based PC users - especially where users employ an integrated services digital network (ISDN) either directly or

via a local area network (Lan).

For example, Tel-Me provides near-instant access to services including Thomas' Classified directories, CCN and Infocheck credit checking, PA for live news, BT's Teletricity service, Ordnance Survey, British Rail Information, the AA and weather reports.

The service is designed so that inquiry details are prepared off-line before the call is made. This reduces the cost of calls.

Customers are not limited to those working in the financial and business sectors. The groundsmen at Hillsborough rely on up-to-date weather forecasts to maintain the condition of the pitch for football matches. In addition, Sheffield Wednesday use Tel-Me when playing away to provide road directions to the venues via "Mapper". Information about hotels and restaurants from the AA Travelogue is used to help supporters find somewhere to stay.

Adrian J Morant

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